Acknowledgements

We wish to acknowledge the role of the Project Advisory Committee from the City of Subiaco, Mr Geoff Glass and Mr Bob Tomlins, for their insights and their professional probing of our developing ideas on affordability.

The Office of Policy and Planning, Department of Housing and Works, works closely with the City of Subiaco on a range of social and affordable housing matters. The Office has also provided assistance to this project through the supply of information and data related to some aspects of affordability and Rent Assistance.

Comments on the draft report by Mr Chester Burton, CEO, City of Subiaco, and also by the City's *Social Housing Advisory Committee* were also of great assistance.

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April 2003

TABLE OF CONTENTS

Chapter 1

Executive summary

Background and Project Aims

Since the 1960s there have been pressures on the traditionally 'affordable' housing stock of Australia's inner metropolitan municipalities. These pressures have reflected the 'gentrification' of the inner suburbs, as well as other changes such as the encroachment of commercial activities into former residential areas, and the loss of boarding and lodging houses that met the housing needs of very specific social groups.

Implementation of Subiaco's Social Housing Strategy is one of the features of the City's ***Principal Activities Plan 2002/03 – 2006/07.***

The City's Social Housing Policy is inextricably linked to its commitment

… to the maintenance and development of a broad mix of people living within its community[1].

This project is focused on identifying the existing affordable housing stock, as well as identifying the threats to the continued survival of affordable housing in Subiaco.

The implementation of the City's Social Housing Policy and initiatives has highlighted the need to identify the location and extent of the existing affordable housing stock within the municipality.

This project is focused on identifying the existing affordable housing stock, as well as identifying the threats to the continued survival of affordable housing in Subiaco.

Details of the Project Aims are found in Chapter 2.2.

Underpinning this objective is the question of whether Subiaco is still affordable to a range of social groups, including families with children, one-parent families, older people and people with a disability.

This report includes an analysis of Subiaco's changing social mix. There have been significant changes in Subiaco's population through the 1990s. These trends include a decline in lower paid workers, one-parent families and older people, coupled with a significant increase in the income of Subiaco residents relative to other households in Western Australia. Such trends are entirely consistent with trends that might be expected if Subiaco's housing was becoming less affordable.

Changes in Subiaco's social mix are outlined in Chapter 2.5.

Affordability: what is it?

Affordability has two basic dimensions:

(i) the cost of housing
(ii) the financial capacity of people to pay for that housing.

The affordability of housing is a measure of a household's ongoing housing costs in relation to income. Affordability is relevant to home purchasers as well as to renters.

[1] City of Subiaco: Social Housing Policy: Philosophy

Affordability, the focus of this project, is only one dimension of housing. In addition, issues of *accessibility* to housing (such as entry costs) and the *appropriateness* of housing to an individual's or household's needs (such as number of bedrooms) are also critical. Issues of housing accessibility and appropriateness were beyond the scope of this project.

Financial housing stress is deemed to occur when the cost of housing exceeds an agreed threshold. This threshold is usually expressed as a proportion of a household's income.

The report recommends the measures of financial housing stress identified by the National Housing Strategy. These calculate affordability thresholds for the bottom 40 per cent of income units and identify financial housing stress when housing costs exceed 25 per cent of income for renters, and 30 per cent of income for households with a mortgage.

A full discussion of the concept of housing affordability and related concepts is found in Chapter 3.2.

Recommended affordability benchmarks

The Project Brief specifically addresses the question of affordability for individuals and households who '*aspire to live within the City of Subiaco'.*

As such, it is recommended that the income profiles of the broader Western Australian population are more appropriate to assess affordability for the City of Subiaco than the income profiles of current Subiaco residents . If affordability thresholds are based on the income profiles of those who currently live in the municipality, it may give a misleading picture of affordability for the broader population, including specific social groups, such as people with a disability, who may 'aspire' to live in Subiaco.

It is also recommended that separate affordability thresholds be used for renters in the private sector and home purchasers. The income

The two key affordability thresholds … are $135 per week for households in the private rental market, and $286 per week for those with a mortgage.

profiles of the two groups are very different, and the two housing markets are distinct.

The two key affordability thresholds recommended for this study are:

(i) a private rental affordability benchmark of $135 per week. This figure is 25 per cent of the weekly household income of the 40th percentile of all households in Western Australia who were in the private rental market in 2001, and

(ii) a home mortgage affordability benchmark of $286 per week. This figure is 30 per cent of the weekly household income of the 40th percentile of all households in Western Australia who were purchasing a home in 2001.

In Chapter 3, affordability thresholds have also been calculated for:

- households in different life circumstances (such as families with children, one-parent families etc),
- specific social and income groups (such as those in receipt of an age or disability pension, and those in receipt of unemployment benefits)
- affordability in relation to poverty lines.

However, the incomes of individuals and households in receipt of pensions or benefits are so low that, unless they already own their own home, social housing is the only viable choice.

Full details of all the affordability thresholds examined are found in Chapter 3.

Methodology

A key challenge facing this project was the need to assess the affordability of housing in Subiaco as well as to identify and map specific affordable housing stock. No single source of data allows these objectives to be met.

Census data provide good information on housing costs and household income. Census

data, including specially commissioned cross-tabulations from the 2001 Census have been used extensively in this study. However, these are aggregate data and cannot be used to identify the affordability of particular housing stock in relation to the affordability thresholds adopted for the project.

To assess the costs of the private rental market in Subiaco, the consultants developed a register of rental vacancies from publicly-available data sources (such as newspapers and real estate websites).

The cost of home purchase was examined from records held by the Valuer General on residential sales. Almost 10 per cent of Subiaco's total housing stock was sold in 2001-2002, and details of all these dwelling sales were obtained and analysed for this project.

Details of the methodology of the study and the overall approach to the brief are outlined in Chapter 2.3.

Housing stress in Subiaco

The level of housing stress in the City of Subiaco is considerable. Chapter 4 analyses the extent to which Subiaco residents experience financial housing stress. Two different sources of Census data have been used to provide alternative perspectives, including detailed analysis from unpublished Census data.

Within the private rental market, there is a high level of financial housing stress:

- for those households in the bottom 40 per cent of incomes in private rentals, only 21 per cent were paying less than the affordability threshold of 25 per cent of their household income

- three out of every four private rental households in Subiaco who pay over 25 per cent of income in rent have an affordability gap of more than $50 per week.

Detailed analysis of financial housing stress amongst Subiaco renters is found in Chapter 4.3.

Financial housing stress in Subiaco is not confined to the private rental market and there are significant numbers of modest-income and low-income households who are paying a high proportion of household income in loan repayments. Amongst home purchasers:

- for those households in the bottom 40 per cent of incomes, 38 per cent were paying in excess of 30 per cent of their household income in loan repayments
- over half of these households who paid over 30 per cent of income in loan repayments had an affordability gap of over $50 per week

Detailed analysis of financial housing stress amongst Subiaco home purchasers is found in Chapter 4.3.

The costs and affordability of private rentals in Subiaco

While Census information allows an aggregate picture of housing affordability in Subiaco, it does not provide any detailed information on the private rental market, especially site information (addresses) that could be mapped.

As such, it has been necessary to develop a specific database of private rental housing in the City of Subiaco. This database was compiled over a five month period from August 2002 to January 2003. Data on 291 advertised vacancies were collected from public sources of information including newspapers (local and state), real estate property lists and real estate websites.

The mean rental price on advertised vacancies (in the City) was $234 and the median rental slightly lower at $220 per week

The mean rental price on advertised vacancies over this period was $234 and the median rental slightly lower at $220 per week.[2] However, given the variation in housing costs for different size units and dwelling types, these overall figures are much more revealing if broken down into sub-

[2] The mean is the arithmetic average of a set of numbers. The median rent is the mid-point in the distribution of rentals: ie 50% of rents were above this figure and 50% below it.

groups. For example, the median weekly rental of dwellings with:

- one bedroom was $130
- two bedrooms was $200, and
- three or more bedrooms was $295 per week.

A profile of rental costs has been developed for each suburb within the municipality, as well as specific addresses for the mapping of affordable housing.

Details of the private rental profile for Subiaco, including a suburb-by-suburb analysis, are included in Chapter 5.2.

The affordability of private rents in Subiaco

As outlined above, the affordability threshold in the private rental market adopted for this project was $135 per week. This represents the 40th percentile of household income for all Western Australian households in private rentals. This affordability threshold is only marginally above the median rent demanded for one bedroom vacancies in Subiaco ($130 per week).

… Low income renters who aspire to live in … Subiaco are highly unlikely to be able to afford anything but a one bedroom dwelling.

In other words, low income renters who aspire to live in the City of Subiaco are highly unlikely to be able to afford anything but a one bedroom dwelling. Privately rented accommodation in Subiaco for families or households in the bottom 40 per cent of incomes who require two or more bedrooms is extremely problematic.

The affordability of Subiaco rentals for different social groups is summarised in Table 5.5 (reproduced below). It paints a bleak picture of housing affordability in Subiaco. Only 22 per cent of advertised vacancies would have been affordable to all WA households in the private rental market. For one-parent families, and those dependent upon Centrelink payments (such as age or disability pensioners and the unemployed) ***none*** of Subiaco's advertised vacancies would have been affordable.

Full details of the affordability of private rentals are found in Chapter 5.3.

The monitoring of the private rental market is a resource-intensive activity. To enable the City of Subiaco to have a more cost-effective means of identifying affordable housing, synthetic estimates of private rentals were successfully generated from the statistical relationship between market rents and the Gross Rental Value of properties set by the Valuer General.

This enables us to estimate the market rent of every dwelling in Subiaco and to map the locations of properties that are likely to be affordable should they enter the private rental market.

Full details of the methodology and results of estimating of private rentals are found in Chapter 5.4.

Table 5.5: Affordability: selected groups / life circumstances

Social group/life circumstance	Income (or income of 40th percentile)	25% of income (or 25% of income of 40th percentile)	Proportion of advertised private rentals in Subiaco affordable to group (%)	
			All dwellings	3 bedroom dwellings
All households in WA	$631	$158	**30**	**1**
All privately renting households in WA	$539	$135	**22**	**1**
Privately renting, couple family with children (WA total)	$756	$189	**41**	**1**
Privately renting, couple family without children (WA total)	$754	$189	**41**	**1**
Privately renting, one-parent family (WA total)	$343	$86	**0**	**0**
Privately renting, 'Other family' (WA total)	$562	$140	**27**	**1**
Over 21/ unemployed/ single(Centrelink)	$223	$56	**0**	**0**
Age pensioner – single(Centrelink)	$245	$61	**0**	**0**
Disability Support Pension (18-20 years/independent) (Centrelink)	$230	$58	**0**	**0**

Source: ABS special cross-tabulations; Centrelink

The costs and affordability of home purchase in Subiaco

There are also considerable challenges in developing an accurate database for the cost of housing for purchase. The best evidence of the cost of housing are the records of sale prices collated by the Office of the Valuer General (OVG).

This project has utilised records obtained from OVG to analyse all residential sales in the City of Subiaco from 1 July 2001 to 30 June 2002. The results of this analysis are outlined in Chapter 6. The key findings of this analysis were:

During 2001-2002 almost 10 per cent of Subiaco's housing stock was sold. The median sales price was $340,000.

- during 2001-2002 almost 10 per cent of Subiaco's housing stock was sold
- the mean sales price[3] for residential property in Subiaco for this period was almost $347,000 with the median sales price[4] slightly lower at $340,000.
- over two-thirds of all properties sold fell within the price range $174,000 to $520,000.

This database allows an aggregate picture (ie suburb by suburb) of housing sales by cost. However, the individual addresses of properties of different prices can also be mapped to give an accurate picture of affordable housing.

Is home purchase affordable?

For the 'modest' income mortgagees (40th percentile) able to support a mortgage for a property bought for less than $204,000, only 23.4 per cent of all sales in the City of Subiaco were 'affordable'. This means that the vast majority of sales in Subiaco were not an option for modest income households without experiencing considerable financial housing stress.

For low-income households (20th percentile for WA) the picture is bleak. Their affordability threshold can only support a mortgage of less than $84,000 without experiencing financial

[3] The mean sales price is the arithmetic average of all sales.

[4] The median sales price is the 'midpoint' in the distribution: ie 50% of sales were below this figure and 50% above it.

Only three dwellings sold in the City of Subiaco in 2001-2002 were 'affordable' for low-income households

housing stress. Using these criteria, only three dwellings sold in the City of Subiaco in 2001-2002 were 'affordable' for low-income households.

The proportion of all sales that were affordable to various social groups and households in different life circumstances are detailed in Table 6.6. This table is reproduced below. It shows clearly that the affordability of Subiaco housing is generally beyond the reach of most modest and low income earners in all life circumstances, even though this analysis is based on the income profiles of households who are already able to purchase a home somewhere in the State.

Table 6.6 shows that affordability of all sales in Subiaco, as well as the affordability of three bedroom dwellings. Much of the 'affordability' of all dwellings is over-estimated as most of the low-cost sales are one bedroom flats, and unsuitable for most families.

Table 6.6: Affordability: selected groups / life circumstances

Social group/life circumstance	Income (or income of 40th percentile)	30% of income (or 30% of income of 40th percentile)	Mortgage repayments of 30 % income could support purchase of:	Proportion of sales in Subiaco affordable to group (%)	
				All dwellings	3 bedroom dwellings
All households in WA	$631	$189	$134,000	**12**	**0**
All households in WA with mortgage	$954	$286	$204,000	**23**	**2**
Home buyers, couple family with children (WA total)	$1006	$302	$252,000	**31**	**8**
Home buyers, couple family without children (WA total)	$1038	$311	$260,000	**33**	**10**
Home buyers, one-parent family (WA total)	$489	$147	$104,000	**1**	**0**
Home buyers 'Other family' (WA total)	$843	$211	$151,000	**15**	**0**
Over 21/ unemployed/ single(Centrelink)	$223	$67	$44,000	**0**	**0**
Age pensioner – single(Centrelink)	$245	$74	$47,000	**0**	**0**
Disability Support Pension (18-20 years/independent) (Centrelink)	$230	$69	$45,000	**0**	**0**

Source: ABS special cross-tabulations; Centrelink

Chapter 2

Setting the scene

2.1 Background

(1) Affordable housing in the inner city

The inner suburbs of most major metropolitan centres in Australia have been the traditional location of a considerable amount of affordable housing stock for low-income residents. This has normally included lower-cost housing for purchase, as well as private rental stock. Boarding or lodging houses, which have provided accommodation for various low-income and special needs groups, have also been clustered in some inner city areas. In addition, small stocks of public and social housing have also been developed by State government and other providers in some inner city areas.

Since the 1960s there have been increasing pressures on lower-cost housing stock in Australian cities through gentrification and other pressures. This has seen a sharp increase in land values and the redevelopment of many inner city areas. These forces have continued through the 1990s and are likely to be key urban

processes impacting on inner cities and their social mix for the foreseeable future.

In the past 20 years or so there has also been an increase in other forms of social housing as the community housing sector in Australia has developed to address problems of affordability. This includes the active involvement of a small proportion of local authorities that have embraced social housing as part of a broader social agenda.

there is a dearth of information about social or affordable housing: the amount of stock, its scope and ownership patterns, its financing, and the extent to which housing stress is experienced by various individuals and social groups.

The broader community housing sector has targeted at-risk households who may otherwise struggle to afford housing on the open market. The de-institutionalisation of mental health and disability accommodation has also introduced other providers of social housing.

Despite these trends, there is a dearth of information about social or affordable housing: the amount of stock, its scope and ownership patterns, its financing, and the extent to which housing stress is experienced by various individuals and social groups.

(2) City of Subiaco's Social Housing Strategy

Implementation of the City's Social Housing Strategy is one of the features of Subiaco's ***Principal Activities Plan 2002/03 – 2006/07.***

The City's Social Housing Policy is inextricably linked to its commitment

> … to the maintenance and development of a broad mix of people living within its community[5].

The City has undertaken a number of key initiatives in defining and establishing its role in social housing.

The City has undertaken a number of key initiatives in defining and establishing its role in social housing. These include:

- the commissioning of the Affordable Housing Research Study, October 2000 conducted by the Community Housing Coalition of Western Australia
- the adoption of its Social Housing Policy (19 December, 2000)

[5] City of Subiaco: Social Housing Policy: Philosophy

- establishment of the Social Housing Advisory Committee

- appointment of a Social Housing Development Officer

- identification of specific projects and initiatives through which the City may progress its social housing goals.

This project is a key component of the City's broader social housing strategy and will provide the City with an appropriate database on affordable housing stock. It will also provide a better understanding of the pressures impacting on affordable housing and the likely impact of these on future social mix for the City of Subiaco.

The nature of the housing stock in the City of Subiaco is fundamental to an understanding of the processes of gentrification, and to identification of the strategies necessary for implementing a social housing policy in the face of powerful market forces.

The rising land values within Subiaco over the past few years reflect the broad appeal of the City as a highly desirable community in which to live. Arguably, there is '*something different about Subi'* which gives it a unique sense of community and reinforces the desirability of its housing stock. Paradoxically, this very sense of community pushes land values even higher and poses a threat to the continued social mix that has made the municipality what it is today.

Subiaco's housing stock ranges from character homes of yesteryear, through to new developments of a high standard that enhance the streetscape of the municipality. There are also significant pockets of housing of a lower standard, including a number of blocks of flats built in the 1960s to standards that would not necessarily be acceptable today.

2.2 Project aims

This project is focused on identifying the existing affordable housing stock, as well as identifying the threats to the continued survival of affordable housing in Subiaco.

The implementation of the City's Social Housing Policy and initiatives has highlighted the need to identify the location and extent of the existing affordable housing stock within the municipality. This project is focused on identifying the existing affordable housing stock, as well as identifying the threats to the continued survival of affordable housing in Subiaco.

The project has two overarching aims:

(1) to identify, document and map the location of the existing 'affordable housing' stock within the City of Subiaco.

(2) to identify and document the threats to the existing 'affordable housing' stock within the City of Subiaco.

Within each of these aims there are a number of specific objectives.

Aim 1: to identify, document and map the location of the existing 'affordable housing' stock within the City of Subiaco

Objectives

1.1 The identification of household types by financial and social characteristics, that aspire to live within the City and are most vulnerable to experiencing 'housing stress'.

1.2 The establishment of 'affordability benchmarks' for each of these household types – i.e the maximum dollar ($) rental and mortgage that can be afforded without experiencing housing stress.

1.3 The establishment of 'affordability benchmarks' relevant to people with disabilities and seniors (aged 55 years and over).

1.4 Using these benchmarks, the identification and mapping of the location of existing 'affordable housing' within the City – stock that the household types identified can rent

or purchase without experiencing housing stress.

1.5 Using these benchmarks, the identification and mapping of the location of existing housing stock that would consume higher levels of the weekly income of the household types identified.

1.6 A recommended process by which the City may update on an on-going basis its identification and mapping of housing that:

- is 'affordable' to the household types identified;
- would consume identified higher levels of the weekly income of the same households

1.7 Identification of the 'affordability gaps' experienced by these households when seeking to rent or purchase in the local housing market.

Aim 2: to identify and document the threats to the existing 'affordable housing' stock within the City of Subiaco

Objectives

2.1 The identification of the factors that are likely to have an impact, over the next five to ten years, on the 'affordability' of housing for the household types identified in Objective 1.1 above.

2.2 An analysis of the likely individual and combined impact of these factors over this period on the level of 'affordability' of housing for these household types.

2.3 Overview of methodology and approach

The very specific requirements of this project for identifying and mapping affordable housing within Subiaco has posed considerable challenges in identifying and developing data sources, as well as in the analysis of these data.

Housing ***affordability*** is generally monitored through broad aggregate measures, such as the mean value of housing in a suburb, or the mean value of home sales. For example, the previous research undertaken by the City in this area used median house prices and related these to aggregate measures of income, such as average weekly earnings, to assess affordability.

This project goes well beyond these broad approaches and seeks to identify specific housing stock within the City of Subiaco in terms of its affordability. For example, if the actual cost of each house sold is used to measure affordability, rather than the median price of house sales, it becomes possible to determine what proportion of dwellings that have been sold below the median sale price are affordable. Similarly, if specific market rental values can be identified for specific properties, this can yield far more accurate measures of affordability than analysis based on aggregate data and the use of median rents.

However, there is no single or easily accessible source of data that can be used to gauge the affordability of specific properties within Subiaco. As such, this project has employed a number of different data sources, and a diverse set of methodologies in order to extract as much information as possible in building up a picture of the affordable housing stock in Subiaco.

Affordability has two basic dimensions:

(i) the cost of housing

(ii) the financial capacity of people to pay for that housing.

The sources of data, and the broad methodology adopted to address each of these dimensions,

are outlined below. Further details of these methodologies are included later in the report, and in the appendices.

(1) The cost of housing: methodological overview

The cost of housing in different suburbs is available in aggregate form from a number of different sources. For example, REIWA regularly publishes through the press, the median sales price in various Perth suburbs, and changes in these figures over the past three months and past year.

However, as indicated above, the use of median figures does not allow specific properties to be identified as affordable or unaffordable.

Sales evidence

Data on the sale price of specific properties within the City of Subiaco were obtained for this project from the Office of the Valuer General (OVG) for the year 2001-2002. This has yielded very specific information on the location and price of all sales in 2001-2002 and provides an accurate picture of the cost of purchasing a dwelling for this period.

Detailed analysis of the cost of purchasing housing in Subiaco, and the affordability of this housing, is found in Chapter 6.

Rental evidence

Broad rental costs in different localities are obtainable from Census data. Census data provides some very useful insights into housing affordability, and is used extensively in Chapters 3 and 4 where issues of affordability and financial housing stress are examined.

However, aggregate sources of data, such as those from the Census, cannot be used to determine the affordability of specific properties within the City of Subiaco. To obtain this level of detail, it has been necessary to generate a database of the private rental market in Subiaco so that links between specific properties and rental costs can be established.

Real estate agents in Subiaco were not prepared to provide details of their rental rolls to the consultants to develop this database. Restrictions of privacy legislation were commonly cited as the reason for this even though no details of either owners, nor tenants were sought. As such, it has been necessary to build up a database using advertised vacancies. All advertised vacancies in the private rental market within the municipality were identified by the consultants from publicly available information such as press advertisements, real estate vacancy lists distributed by agents, and real estate websites.

These data have been used to develop a profile of the costs of rentals in the private market. This analysis also has enabled profiles to be established of rental costs in the various suburbs of Subiaco. The costs and affordability of the private rental market in Subiaco is explored in Chapter 5.

However, the development of such a database for the private rental market is time-consuming and resource intensive. In order to broaden the utility of the database, further research was undertaken on the relationship between market rents for advertised vacancies, and the Gross Rental Value (GRV) of those properties set by the Valuer General. GRVs are used by the City to determine the annual municipal rates levied against each property.

The statistical relationship between market rents and GRVs was explored by means of correlation and regression analysis to determine if GRVs could be used confidently to assess affordable housing. The detailed methodology and outcomes of this analysis are outlined in Chapter 5.4.

Mapping affordable housing

Using the databases developed for both the private rental market and the sales evidence, maps have been produced that identify the location of affordable housing within the City of Subiaco. These maps have been produced using GIS technology, and provide a valuable database for the City to monitor affordable

housing. Full details of the mapping of affordable housing are provided in Chapters 5 and 6.

(2) housing affordability: the capacity to obtain housing without financial housing stress

The cost of housing is just one side of the affordable housing equation. The other side is the capacity of individuals and households to pay for the housing that is available.

This project has reviewed the concept of affordability and has established affordability benchmarks for households who might aspire to live in Subiaco.

The key source of data for establishing affordability benchmarks is the Census. Special Census cross-tabulations were purchased that have enabled analysis of the income profile of households in relation to the housing costs they experience.

The income profiles of households enable affordability thresholds to be established. The complex considerations about affordability thresholds are explored in Chapter 3 and affordability benchmarks recommended and adopted for this study are outlined.

The Census data on housing costs and income allow some analysis of the extent to which financial housing stress prevails. Financial housing stress occurs when the cost of housing for a household exceeds what they should be paying according to the affordability benchmarks adopted.

Housing affordability is a complex issue and is explored in Chapter 3. Benchmarks have been determined using a variety of data sources and for a variety of different populations. These populations include Subiaco residents, the total Western Australia population and special needs groups. The specific affordability benchmarks recommended for the City of Subiaco are outlined in Chapter 3.

2.4 Setting the scene: a profile of housing in Subiaco

In order to set the scene for the specific research of this project on the identification and mapping of affordable housing in Subiaco, it is pertinent to outline some of the key characteristics of housing within the municipality.

(1) Housing tenure

The City of Subiaco's housing profile is quite distinctive in its balance of rental property and home ownership (Table 2.1). In 2001, only 25 per cent of Western Australia's households were in rented accommodation, whereas the proportion of renters and homeowners /purchasers in Subiaco is quite balanced. However, the proportion of Subiaco dwellings that are rented has fallen from 49 per cent in 1996 to 46 per cent in 2001.

Table 2.1: Broad tenure groupings: Subiaco & Western Australia 1991-2001

	1991 %	1996 %	2001 %
Fully owned/being purchased			
City of Subiaco	47	45	47
Western Australia	67	67	68
Rented			
City of Subiaco	48	49	46
Western Australia	28	27	25

Source: ABS 2001 Census Basic Community Profiles

Tenure and age

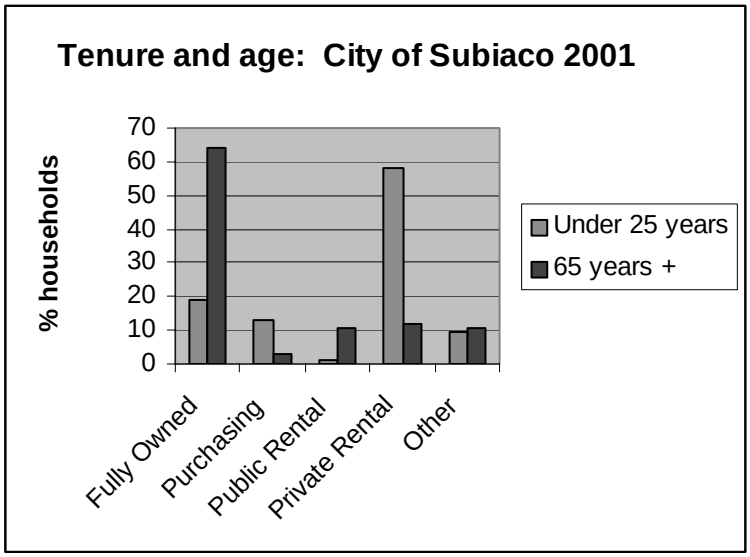
Only 12 per cent of older people in Subiaco rent privately…marginally more than the proportion of older people in public housing in the City

While home ownership and rentals are fairly well balanced in Subiaco, there are very different tenure patterns amongst different age groups. Older people (65 years and over) have high levels of outright ownership (64 per cent) with very small numbers still purchasing a home. Only 12 per cent of older people in Subiaco rent privately. This is marginally more than the proportion of older people in public housing in the City (11 per cent).

By way of contrast, the housing tenure of those under 25 years is dominated by the private rental

market which houses almost 60 per cent of Subiaco's younger residents (see Figure 2.1).

Figure 2.1: Tenure and age: City of Subiaco 2001



Source: ABS Census 2001

Tenure and household type

There are also significant differences between the tenure patterns of different household types. The highest rates of home ownership (either owned outright or purchasing) is amongst couples with a family (76 per cent) whereas around 40 per cent of single person households own, or are purchasing.[6]

Private rentals are highest amongst group households with over 81 per cent renting in the private sector. The household types with the greatest proportion renting in the public sector are single person households (8 per cent) and one-parent families, of which some four per cent are in public rentals.

(2) Dwelling types

The physical nature of Subiaco's housing stock is also quite distinctive and markedly different from that of the State as a whole (Table 2.2). Less than half of all Subiaco's housing stock are

[6] Source: ABS Census 2001 Special cross-tabulations

separate houses, whereas some 78 per cent of all dwellings in Western Australia are separate houses. One third of Subiaco's dwellings are classified as flats, units or apartments. Traditionally, these dwelling types have been predominantly rented accommodation. However, in recent years there have been clear trends towards the strata-titling of blocks of flats and apartments. Their subsequent sale inevitably ends up with some of these being owner-occupied, and thus lost from the rental pool. The implications of such trends for the supply of affordable housing are obvious.

Table 2.2 Dwelling types: Subiaco & Western Australia 1991-2001

	1991 %	1996 %	2001 %
Separate houses			
City of Subiaco	50	48	48
Western Australia	79	77	78
Semi-detached, terraces etc			
City of Subiaco	18	16	18
Western Australia	12	12	11
Flats, units, apartments etc			
City of Subiaco	31	35	33
Western Australia	6	7	7
Other dwellings			
City of Subiaco	0.1	0.3	0.3
Western Australia	2.8	2.4	2.5

Source: ABS 2001 Census Basic Community Profiles

(3) Subiaco's suburbs

It is also appropriate to discuss briefly the nature of some of Subiaco's suburbs. The boundaries of the municipality are complex, especially on the southern boundaries where the City abuts the Cities of Nedlands and Perth.

In particular, some of the suburban names of the City of Subiaco, such as Crawley and Nedlands, are common to these other municipalities. Some of these suburban names are also commonly called other names from their official designation. For example, those parts of the City of Subiaco designated as Crawley, are commonly referred to as Nedlands. This includes a considerable amount of rented accommodation and blocks of flats close to the University of Western Australia. By way of contrast, the popular conception of

Crawley is an area of exclusive, expensive, high-rise apartments commanding sweeping views of the Swan River. Most of this part of Crawley falls within the City of Perth and is excluded from any analysis of "Crawley' housing in this study. The suburb boundaries are included in the appended maps of affordable housing.

2.5 Setting the scene: social mix in Subiaco

Subiaco has traditionally been an area of considerable social mix. Historically, the building of workers' cottages in close proximity to more expensive and grander homes of higher income groups has led to a mix of people from different socio-economic backgrounds. In addition, factors such as the proximity of the University of Western Australia, as well as the benefits of Subiaco's inner city location abutting Kings Park, have attracted a range of social groups.

In recent decades, Subiaco has gone through changes associated with the so-called 'gentrification' of prime areas of inner city housing. This can lead to the displacement of many individuals and households who are unable to compete for housing.

Assumptions about threats to affordable housing through gentrification carry with them an implication …[of a]… decline in the municipality's traditional social mix

Assumptions about threats to affordable housing through gentrification carry with them an implication that rising land values and housing costs in Subiaco are likely to be associated with a decline in the municipality's traditional social mix.

A socially mixed community is commonly seen as a desirable outcome of community and town planning. In Britain and the United States, social mix has often been used as a strategy to stabilise areas of high levels of public housing by introducing higher levels of home ownership, or by attracting higher income households into areas of urban decline[7].

In other cases, the 'sprinkling' of social housing in areas of redevelopment, or in suburbs with high amenity value, is seen as a means of creating more socially-balanced communities.

[7] See for example, Centre for Local Policy Studies ***Research into housing regeneration and social mix*** (www.edgehill.ac.uk/research/clps/rhrsm.htm

Social mix in Subiaco

Although social mix is not a major focus of this project, it is useful to consider just how socially mixed Subiaco is, and whether or not that mix is increasing or diminishing.

The range of social characteristics that could be included in any analysis of social mix is limited only by data sources. Studies of social mix commonly include analysis of:

- age structures
- ethnicity
- socio-economic status
- occupation
- income
- family types.

In examining the social mix of an area, it is important to establish the benchmark, or baseline, against which the area is to be measured. In the case of Subiaco, its social mix could be compared with other inner city municipalities, the Perth metropolitan area, or the state as a whole. In some redevelopment and community planning projects, the objectives are to achieve the same social mix as exists in the broader region (see for example, City of Vancouver, 2001)

To assess trends in the social mix of Subiaco, seven Census variables related to occupational status, income, family structure and age structure were chosen for closer examination over the period 1991-2001. These variables were:

Occupation:

- managers, administrators and professionals
- tradespeople
- labourers and related workers

Income:

- median income of individuals[8]

[8] ABS generally publishes income data in broad bands. The median incomes were calculated from grouped data with the assumption that the distribution of incomes over any category of income (eg $400-$499) was spread evenly over the range.

Family structure

- families with children (whether dependent or not)
- one parent families.

Age structure

- Population aged 65 years and over

The data for these variables from the Censuses of 1991 and 2001 are presented for the City of Subiaco and for Western Australia in Table 2.1.

Table 2.1: Selected social characteristics: Subiaco and Western Australia, 1991 and 2001

Variable	Area	1991 %	2001 %
Professionals etc	WA	32	39
	Subi	55	65
Tradespersons	WA	14	13
	Subi	5	4
Labourers & related workers	WA	13	9
	Subi	8	4
Individual income (mean)	WA	$304	$366
	Subi	$323	$470
Couple families with children	WA	54	47
	Subi	37	36
One parent families	WA	13	15
	Subi	19	15
Population over 65	WA	10	11
	Subi	14	11

Source: ABS Census 1991, 2001

Subiaco's changing social mix

It is useful to look at these social characteristics from the perspective of Subiaco by itself, as well as changes in Subiaco's social characteristics relative to changes in the broader Western Australia population.

Subiaco's population has changed significantly over the decade 1991 – 2001 in a number of areas. Figure 2.1 shows that, in terms of occupational structure, the overwhelming proportion of Subiaco residents in professional and managerial occupations has increased, whereas the proportion of labourers has

decreased some 88 per cent[9]. This is reflected in the trends in individual income for Subiaco residents, which increased by 46 per cent over this period. By way of comparison, individual incomes in Western Australia as a whole increased by only 20 per cent and the CPI increased by only 25 per cent over this period.

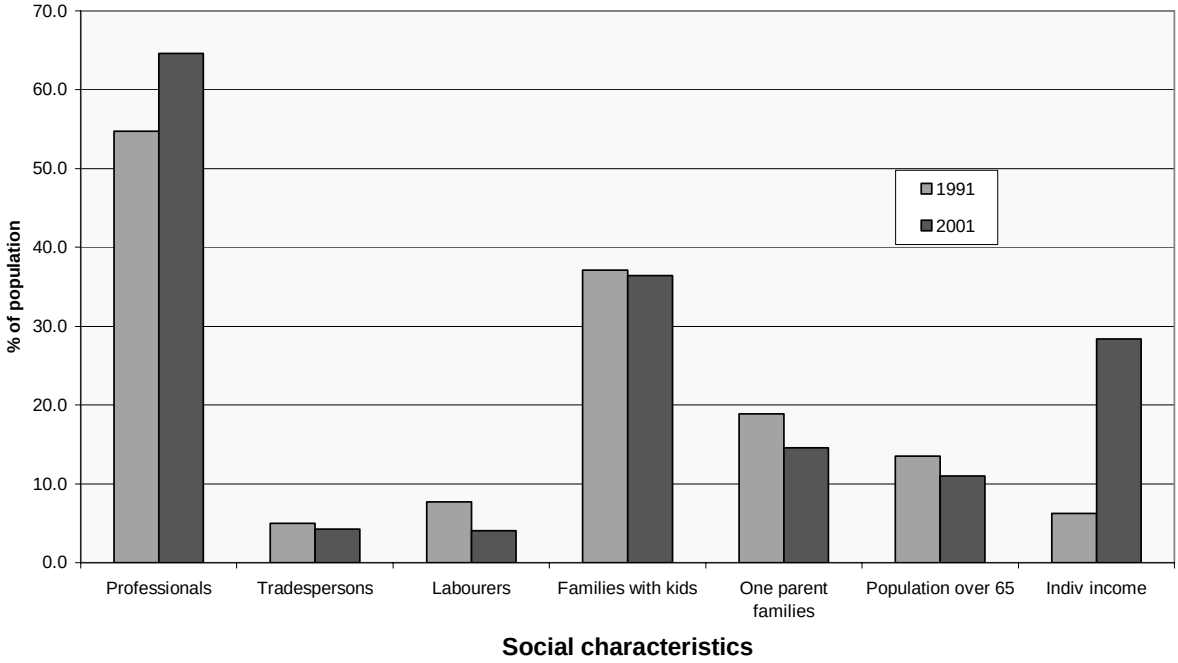
These trends for a decline in lower paid workers, one-parent families and older people, coupled with a significant increase in the income of Subiaco residents, are entirely consistent with trends that might be expected if Subiaco's housing was becoming less affordable.

In terms of family and age structure, the picture is mixed. While the proportion of families that are comprised of a couple plus children has remained relatively stable, there have been significant decreases in Subiaco in the proportion of one-parent families, and in the proportion of elderly people living in the municipality.

These trends for a decline in lower paid workers, one-parent families and older people, coupled with a significant increase in the income of Subiaco residents, are entirely consistent with trends that might be expected if Subiaco's housing was becoming less affordable.

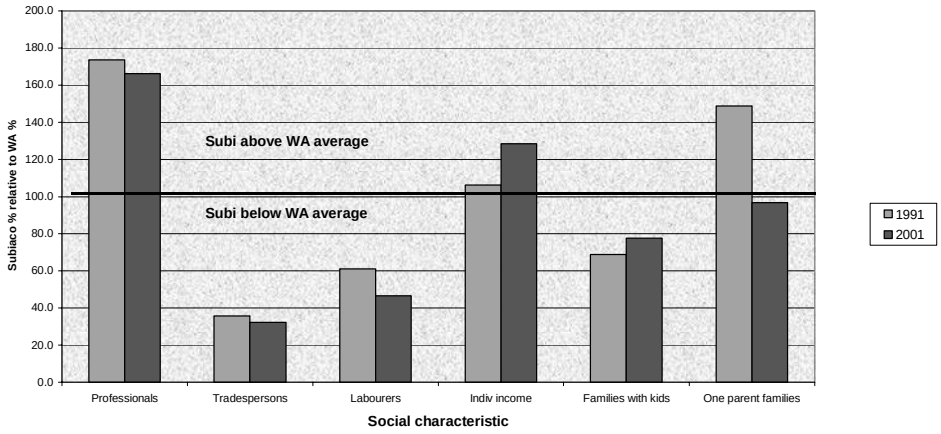
[9] **Source : ABS: 1991 Census and 2001 Census**
Note : individual income figures in the above graph relate to the percentage that Subiaco incomes were above WA incomes

Fig 2.2: Subiaco social characteristics: 1991 & 2001



In Figure 2.3 the relationship between Subiaco's score on any variable and the score for that variable for Western Australia as a whole are presented graphically[10]. If Subiaco had the same social mix of these variables as Western Australia as a whole, all scores would lie on the line with a value of 100. Presentation of data for 1991 and 2001 allows us to see if Subiaco is getting closer to the state figure or further away; in other words, is social mix increasing or decreasing?

Fig 2.3 Comparing Subiaco's social mix to the WA population



Comparing Subiaco's social mix to the broader Western Australia population, reveals a somewhat mixed picture. In terms of occupational groups, it is clear from the earlier analysis that Subiaco has a much higher proportion of professionals, managers and senior administrators than does Western Australia as a whole. However, the gap between Subiaco and the State actually diminished slightly over this time.

With the other two occupational groups analysed, Subiaco moved slightly *further* from the State average in both its proportion of tradespersons and in its proportion of labourers. In other words, while the occupational structure of Subiaco

[10] The relationship between Subiaco's score and the WA average for that variable has been calculated by multiplying Subiaco's score by 100 and dividing it by that of WA. A score of 100 indicates that Subicao has the same proportion of that social group as WA as a whole. A score of 200 indicates Suibiaco has twice the proportion of that group than WA, and a score of 50 indicates that Subiaco has half the proportion of that social group compared to the state figure.

residents is very different from the occupational profile of all Western Australians, there have been only minor changes in these differences over ten years.

In terms of median individual income, these data suggest that Subiaco is becoming less socially mixed and increasingly 'different' from the State as a whole. The mean income of individuals in Subiaco was higher than that of all Western Australians in both1991 and 2001 but the relative gap increased over this period.

The picture of trends in social mix painted by data on family structure is quite different. Subiaco has considerably fewer families consisting of a couple with children than Western Australia as a whole, although this figure had moved slightly closer to the State average over this ten-year period. The proportion of one-parent families in Subiaco (which was higher than the State average in 1991) has declined and is now closer to the State average than it was ten years earlier.

In terms of income, Subiaco residents are 'wealthier' than other Western Australians are, and this gap has increased since 1991. However, in 2001, the broad family structure of Subiaco was somewhat closer to that of the State as whole than it was ten years earlier.

Overall, Subiaco residents are still characterised by an exceptionally high proportion of white collar and professional workers. In terms of income, Subiaco residents are 'wealthier' than other Western Australians are, and this gap has increased since 1991. However, in 2001, the broad family structure of Subiaco was somewhat closer to that of the State as a whole than it was ten years earlier.

This suggests that Subiaco is achieving one dimension of social mix: namely attracting a range of family types, but these families are increasingly higher income than the rest of the State and characterised by very high rates of professionals, and highly paid managers and administrative workers.

A recent paper by the Social Planner from the City of Adelaide, suggests that:

> Residential social mix is an essential aspect of being a leading City. As a fundamental part of Council's strategies, understanding, building and maintaining a viable social mix requires vision, long term commitment, and resources. A case must be made for it, and

> the community needs to be part of creating it..[11]

If social mix is important to the City of Subiaco, it should be actively engaged in shaping the social mix it requires as part of a broader community development role.

As indicated above, a detailed analysis of social mix is beyond the scope of this project. However, irrespective of the outcomes of this analysis of affordable housing in Subiaco, the link between trends in affordable housing and social mix should be part of the City's strategic considerations in its planning and community development agendas. It follows that a loss of affordable housing will diminish the social mix of the City. If social mix is important to the City of Subiaco, it should be actively engaged in shaping the social mix it requires as part of a broader community development role.

[11] Fairley, A (2002) ***What sort of goods are neighbours? Social mix and a sustainable residential community in Adelaide***; A 'Green Paper' for the City Living Summit, Adelaide, Febraury 2002

Chapter 3

Understanding affordable housing and related concepts

3.1 Clarifying the issues

The main objectives of this project, as set out clearly in the Project Brief and discussed in Chapter 2, incorporate a number of key concepts which must be understood before examining affordable housing in Subiaco.

Foremost amongst these is the concept of ***affordable housing*** itself. This chapter outlines the key concepts of housing affordability and uses this information to establish affordability benchmarks relevant to the characteristics of the residents of Subiaco. In addition, the related concept of ***housing stress*** is outlined.

There has been considerable attention paid to the levels of housing stress experienced by Australian households. For example, Berry notes that there is much discussion on '*an emerging crisis in housing affordability*' (2001, p5)

Berry and Hall's analysis, of housing stress amongst private renters showed that for all capital cities in Australia, housing stress amongst private renters rose from 64.1 per cent of low-income renters in 1986 to almost 73 per cent in 1996. Perth, however, went against the national trend with a modest decline in housing stress from 59.9 per cent in 1986 to 56.1 per cent in 1996 (Berry, 2001, p5).

Within Western Australia, the Office of Policy and Planning within the Department of Housing and Works has recently produced an issues paper on affordability as part of ***Housing Strategy WA*** (Department of Housing and Works, 2002). This paper suggests that while Western Australia has not experienced the housing stress of other states…

> Western Australia is possibility at a watershed in terms of affordability for many in the private rental market and those trying to access home ownership (Department of Housing and Works, 2002, page 3)

The focus of this chapter

In order to have an appropriate framework to examine affordability in Subiaco, this chapter begins with a discussion of what is meant by affordable housing.

Recommended affordability benchmarks for the City of Subiaco are developed in section 3.3 of this chapter. Later sections of this report will draw on these thresholds to evaluate the extent to which housing in Subiaco is affordable. The thresholds also provide benchmarks for the mapping of affordable housing.

The concept of ***social mix*** is also central to the context of this project, and is explored later in this chapter. The examination of social mix is not a key objective of this project. However, some understanding of social mix in Subiaco, and a brief analysis of changes in social mix over time, are important contextual components of the project.

3.2 Affordable housing: what does it mean?

The concept of housing affordability has long been incorporated into social policy and measures of poverty in Australia.

The affordability of housing is a measure of ongoing housing costs in relation to a household's income. The concept of housing affordability is relevant to households who are renting as well as to those who are purchasing their home.

In order to address the key objective of this project, to identify and map affordable housing stock in the City of Subiaco, it is essential to have a good understanding of what is meant by affordable housing, and to establish some affordability benchmarks appropriate for the City of Subiaco.

(1) Poverty lines

The use of an 'after-housing' poverty line … demonstrated starkly the relationship between poverty and housing costs, especially for households in the private rental sector.

The Australian Government's ***Commission of Inquiry into Poverty*** (1975) (the Henderson Commission) developed the concept of a poverty line with two separate components. The first was the calculation of a poverty line based simply on income; the second was a poverty line after housing costs were taken into account. The use of an 'after-housing' poverty line by the Henderson Commission demonstrated starkly the relationship between poverty and housing costs, especially for households in the private rental sector.

Poverty line figures for Australia are published quarterly by the Melbourne Institute of Applied Economic and Social Research at the University of Melbourne. While there is no universally accepted measure of poverty, the Henderson poverty lines are widely used in social policy analysis. The poverty line figures calculated represent the weekly income needed by different types of households in order to cover their basic costs and maintain a minimum standard of living.

The links between the Henderson Poverty Line and Centrelink payments for individuals and households in different life circumstances are also widely available for analysis and policy consideration[12].

Further consideration of the Henderson Poverty Lines is incorporated later in this chapter when discussing the appropriateness of housing affordability benchmarks for the City of Subiaco.

(2) Financial housing stress

The most widely cited measure of financial housing stress in Australia stems from the work of the National Housing Strategy.

The most widely cited measure of financial housing stress in Australia stems from the work of the National Housing Strategy in the late 1980s and early 1990s.

The National Housing Strategy based its key affordability calculations on the bottom 40 per cent of income units, based on total before-tax income.[13] The use of the bottom 40 per cent of incomes was selected to exclude individuals who deliberately 'over-consume' housing, and to exclude those who may spend a high proportion of income on housing, but whose *total* income is so high that after-housing income is unlikely to create financial stress.

Within the bottom 40 per cent of incomes, housing stress was deemed to exist if housing costs exceeded either 25 per cent or 30 per cent of before-tax income.

The use of two affordability benchmarks (25 and 30 per cent) related to two different housing tenures:

> For people on low incomes who spend a considerable period of time in private rental, 30 per cent could be too high and 25 per cent may be a more reasonable measure of housing stress in recognition of the fact that long-term renters do not share the benefits of home owners over their lifetimes of decreasing outlays on housing

[12] See, for example, Poverty Line updates published by the Brotherhood of St Laurence (www.bsl.org.au)

[13] The analysis excluded single individuals (income units) living with parents or relatives, as well as those living rent-free, and those with negative or nil incomes.

> in relation to their income (National Housing Strategy, 1991, p 7).

Despite this distinction between 25 and 30 per cent of income spent on housing by people in different tenures, most subsequent usage of housing stress in Australia has used only the 30 per cent benchmark. For example, analysis of unpublished data by ABS from the 1994 Australian Housing Survey revealed that 31 per cent of all low-income households spent more than 30 per cent of income on housing. Not surprisingly, this varied considerably with tenure with the highest proportion of financial housing stress amongst private renters (74 per cent paying more than 30 per cent of income in rent)[14].

Despite this distinction between 25 and 30 per cent of income spent on housing … most subsequent usage of housing …has used only the 30 per cent

The Queensland Department of Housing (2001) acknowledges the two affordability benchmarks. However, it still used the 30 per cent as an initial guide to affordability to show that some 50 per cent of Brisbane households would be unable to rent an average price rental dwelling in the inner city area without exceeding the 30 per cent threshold.

> …If a 25 per cent benchmark were used, the numbers of households affected would be much greater.
> (Queensland Department of Housing, 2001, p2).

(3) Refining measures of housing stress

The standard measures of housing affordability utilised in Australia (over 30 per cent of income spent on housing by those in the bottom 40 per cent of incomes) have been subject to some detailed critiques which expose their limitations. Two useful discussions of these issues are contained in the works of Karmel (1995) and Landt and Bray (1997).

Karmel's analysis of the issues associated with measuring financial housing stress concluded that:

> there are several major flaws in affordability measures based on simple income and housing cost limits. (Karmel 1995, p5).

[14] ABS ***Australia Social Trends 1997: Housing – Housing and lifestyle: Youth housing***

These flaws include:

- the use of 'income units' in the bottom 40 per cent of the income distribution does not take account of differences in household size and composition
- no account is taken of housing costs in different areas
- the '25 per cent of income' cut-off is the same regardless of income and household size.

Karmel suggests that a more comprehensive affordability index could be developed in which the percentage of income allowed for housing is based on household size (1995, p4).

In an attempt to overcome the inherent problems in measuring housing stress it is very easy to 'throw the baby out with the bathwater' and introduce high levels of complexity. For example, Karmel examines three different types of measures, including poverty lines and a Canadian measure of a *'norm rent income'*.[15]. In combining the best elements of various measures, Karmel arrives at a revised measure of housing stress:

> A household is considered to be in financial housing stress if: … household income is below the norm rent income required for households renting the same sized dwellings in that location, *and* housing costs are more than the amount allowed, as determined by the very low income cut-off and the sliding scale of housing costs (Karmel, 1995, p12).

Landt and Bray (1997) have also examined alternative approaches to measuring rental housing affordability in Australia. Despite their conclusion that the tools for measuring housing affordability and the appropriateness of housing are generally weak, they do not go on to recommend a benchmark for housing affordability, nor to conclude whether or not a single benchmark is appropriate across life cycles and household types (1997, p34).

[15] The *'norm rent income'* is defined as the minimum a household requires to rent suitable adequate housing without spending more than 30% of its income (Karmel, 1995, p 5).

(4) Summary

The concept of housing affordability is intuitively simple, but in reality, it is deceptively complex to measure affordability if all relevant dimensions are considered.

In addition to income and housing costs, other relevant considerations include household size, dwelling size, the appropriateness of the housing, and location.

The complexities of incorporating these factors into indicators of affordability, plus the difficulty in obtaining all of the data, undoubtedly explain why most analyses of housing affordability in Australia use only the two standard variables of housing costs and income.

Less clear is why a number of analyses of financial housing stress ignore two of the basic elements of the notion of housing affordability originally incorporated into considerations of the National Housing Strategy. These two considerations are:

(i) confining measures of financial housing stress to the bottom 40 per cent of the income distribution, to avoid inclusion of wealthier households who may choose to 'over-consume' housing, and

(ii) using a different affordability benchmark for renters (25 per cent of income) and purchasers (30 per cent of income).

3.3 Establishing housing affordability benchmarks for the City of Subiaco

Based on consideration of the work on housing affordability and financial housing stress in Australia, the following criteria were used in this project to examine housing affordability in the City of Subiaco:

(i) measures of financial housing stress have been confined to households in the bottom 40 per cent of incomes

(ii) benchmarks for affordability have been set at 25 per cent of income for households in the rental sectors and 30 per cent for home purchasers

(iii) data on household incomes from the 2001 Census of Population and Dwellings have been used to calculate the 'bottom 40 per cent of income limit' relevant to the City of Subiaco and the broader Western Australian population

(iv) specific affordability benchmarks have been included for low-income households dependent upon Centrelink payments, such as an Age Pension, Disability Support Pension, unemployment allowance, or sole parent payments.

1 Alternative benchmarks

A number of alternative housing affordability benchmarks appropriate to the City of Subiaco have been developed for this project. These are presented below, and a recommended benchmark identified.

(1) Household income for different tenure groups (Census 2001)

Using criteria (i) to (iii) above, affordability benchmarks have been calculated for the bottom 40 per cent of household incomes for different tenure groups in two populations. The first is the City of Subiaco population, and the second is for the total Western Australian population. Affordability benchmarks are based on:

(i) income for all households

(ii) income for all *private* rental households

(iii) income for all households with a mortgage.

For each of these household income profiles, affordability benchmarks have been calculated for 25 per cent of the 40^{th} percentile of income and 30 per cent of the 40^{th} percentile of income. These benchmarks are summarised in Table 3.1 for the City of Subiaco and in Table 3.2 for Western Australia. The shaded cells represent the

appropriate benchmark for the tenure group and preserve the distinction made in the National Housing Strategy that 25 per cent of income is an appropriate threshold for renters but 30 is appropriate for home purchasers.

Table 3.1 Affordability benchmarks for various housing tenure groups, City of Subiaco 2001[16]

Household income profile	Income		Affordability benchmark	
	Median	40th percentile	25% of 40th percentile	30% of 40th percentile
All households	$891	$681.00	$170	$204
All private rental households	$693	$550.30	$138	$165
Households with mortgage	$1493	$1326	$331	$398

Source: Calculated from ABS 2001 Census special cross-tabulations of household income and housing costs

Table 3.2 Affordability benchmarks for various housing tenure groups, Western Australia 2001[17]

Household income profile	Income		Affordability benchmark	
	Median	40th percentile	25% of 40th percentile	30% of 40th percentile
All households	$788	$631	$158	$189
All private rental households	$649	$539	$135	$162
Households with mortgage	$1104	$954	$239	$286

Source: Calculated from ABS 2001 Census special cross-tabulations of household income and housing costs

Both Table 3.1 and Table 3.2 highlight the vast differences in life circumstances between those in

[16] The median and 40th percentile incomes and the benchmark figures have been rounded to the nearest dollar.

[17] The median and 40th percentile incomes and the benchmark figures have been rounded to the nearest dollar.

the rental market and those households who are purchasing their own home. Subiaco households with a mortgage had a median income of $1,493 in 2001. This is almost 2.5 times larger than the weekly household income of Subiaco rental households. The median income of all households renting in the *private* sector was slightly higher ($693 per week) but still less than half of the median weekly income of Subiaco home purchasers.

For Western Australia as a whole, there are also stark differences in income between those buying a home and those who are renting, although the differences in income between these tenure groups are not quite as sharp as they are in Subiaco. Nevertheless, the median household income of Western Australian households with a mortgage was 1.7 times greater than that the median household income of those renting in the private sector.

If affordability benchmarks are based on the household income of the 40th percentile of the income distribution, the affordability benchmarks range from $135 per week for Western Australian households in the private rental sector, to $398 per week for households purchasing in Subiaco. This variation reflects the different populations (Subiaco v's Western Australia) as well as the income distributions they are based upon. The benchmarks also vary according to whether 25 per cent of the income of the 40th percentile is taken or 30 per cent of the household's income.

Which benchmark: Subiaco or Western Australia?

The analysis of the household income profiles of Western Australia as a whole and the City of Subiaco reveal that Subiaco households have, on average, a higher income than all households in Western Australia.

In terms of developing affordability benchmarks for the City of Subiaco the issue becomes whether it is more appropriate to base the benchmarks on the household income profile of current Subiaco residents, or on the income profile of the broader Western Australian population.

It is recommended that benchmarks be based on the household income profile for the Western Australian population as a whole. Western

It is recommended that benchmarks be based on the household income profile for the WA population as a whole…. If the affordability benchmarks were to be based only on the household income of Subiaco residents, it would over-estimate the affordability of other households to move into the municipality.

Australian affordability benchmarks addresses more directly requirements of the project brief for this study which referred specifically to ***households which aspire to live in Subiaco***. The current cohort of Subiaco residents has somewhat higher household incomes than households in the State as a whole. If the affordability benchmarks were to be based only on the household income of Subiaco residents, it would over-estimate the affordability of other households to move into the municipality.

However, it is useful to examine affordability benchmarks for other social groups, including people in different life circumstances such as families with children. In later chapters of this report, when housing costs in Subiaco are related to affordability benchmarks, it is valuable to be able assess the extent to which Subiaco's housing stock is accessible to these various social groups.

(2) Household income for different family types (Census 2001)

It is also possible to develop affordability thresholds for different family types. This information can be obtained from the ABS Census 2001[18] through the Basic Community Profile. The income data for the 40th percentile of each family group is shown in Table 3.3, together with the 25 per cent and 30 per cent of income thresholds for each group.

Table 3.3: Affordability thresholds for different family types, Western Australia 2001

Family type	Weekly income of 40th percentile	25 % of income on 40th percentile	30 % of income on 40th percentile
Couple family with children	$955	$239	$287
Couple family without children	$609	$152	$183
One parent family	$388	$97	$116
Other family	$527	$132	$158

Source: ABS Census 2001, BCP Release 2, Table B30

[18] ABS Census 2001: Basic Community Profiles, Release 2, Nov 2002 Table B30

While these thresholds can give insights into affordability for different family types, there are a number of issues that make them less useful than the thresholds discussed above for different tenure groups. In particular, these broad family types cover a broad range of circumstances with different implications for housing affordability. For example, a couple without children could be a retired couple living in their home without a mortgage or a younger unemployed couple struggling to meet rental payments in the private sector.

For these reasons, it is felt that affordability thresholds for different family types are less useful than for those in different tenure groups.

(3) Household income for different family types in different housing tenures

It is possible, through special ABS cross-tabulations from the 2001 Census, to obtain a more detailed picture of the income profile of different social groups, from which affordability benchmarks can be calculated.

In Table 3.4 the income data for the 40th percentile of each family group in the private rental market in Western Australia are together with the 25 per cent and 30 per cent of income thresholds for each group. Table 3.5 includes the same information for different Western Australian households who are purchasing a home.

Table 3.4: Affordability thresholds for different family types in private rentals, Western Australia 2001

Family type amongst private renters	Weekly income of 40th percentile	25 % of income on 40th percentile	30 % of income on 40th percentile
Couple family with children	$756	$189	$227
Couple family without children	$754	$189	$226
One parent family	$343	$86	$103
Other family	$548	$137	$164

These two tables reflect the general income disparity between those in the private rental market and home purchasers. In the private

rental market, the affordability threshold for different family types ranges from $189 per week for couples (with children or without) to only $86 per week for one-parent families. These thresholds are based on 25 per cent of the income of the 40th percentile of each group.

For those who are purchasing a home in Western Australia, the affordability thresholds for different family types range from $311 per week for couples without children, to $147 for one-parent families. These thresholds are based on 30 per cent of the income of the 40th percentile of each group.

Table 3.5: Affordability thresholds for different family types who are purchasing a home, Western Australia 2001

Family type amongst home purchasers	Weekly income of 40th percentile	25 % of income on 40th percentile	30 % of income on 40th percentile
Couple family with children	$1006	$252	$302
Couple family without children	$1038	$260	$311
One parent family	$489	$122	$147
Other family	$843	$211	$253

(4) Centrelink payments (December 2001)

In addition to affordability benchmarks based on various income profiles derived from the ABS Census 2001, affordability benchmarks have also been calculated on standard Centrelink payments for individuals and families in selected different life circumstances (Table 3.6).

In all cases, the maximum Rent Assistance allowance for the respective category of pension or allowance has been added to the standard payment for that allowance type. No allowance for Family Tax Benefit Part B has been taken into account in these calculations.

Table 3.6 Affordability benchmarks based on Centrelink payments[19]

Life circumstances	Pension/allowance plus rent assistance	25% of income	30% of income
Over 21/ unemployed/ single (Newstart)	$223	$56	$67
Single parent with 1 child Not in the labour force	$347	$87	$104
Single parent with 3 children Not in the labour force	$584	$146	$175
Age pension – single	$245	$61	$74
Age pension – couple	$376	$94	$113
Disability Support Pension (18-20 indep)	$230	$58	$69
Disability Support Pension (over 21 indep)	$245	$61	$74

The affordability benchmarks of individuals and households dependent upon various pensions and allowances are considerably lower than those of the broader population. They range from only $56 per week for a single person on Newstart allowance (including the maximum Rent Assistance) to $175 per week for a single parent with three children.

(5) Poverty lines

The Henderson Poverty Lines represent the weekly income needed by different types of households in order to cover their basic costs and maintain a minimum standard of living. In many cases, Government pensions and allowances paid through Centrelink are lower than the income deemed appropriate under the Poverty Line methodology. The Brotherhood of St Laurence website[20] regularly publishes a comparison between Centrelink payments and the Henderson Poverty Lines.

[19] Calculated from Brotherhood of St Laurence Poverty Line update: Information Sheet no. 3 for quarter ending December 2001 (www.bsl.org.au)
[20] www.bsl.org.au

Affordability benchmarks have been included here (Table 3.7) for a selection of household and individual circumstances. Those selected are the same as those used in Table 3.6 above, with the exception of the Disability Support Pension, for which no specific poverty line is recorded in the Brotherhood of St Laurance published tables.

Table 3.7: Affordability benchmarks based on poverty lines

Life circumstances	Henderson Poverty Line	25% of income	30% of income
Over 21/ in workforce/ single (Newstart)	$238	$60	$71
Single parent with 1 child Not in the labour force	$321	$80	$96
Single parent with 3 children Not in the labour force	$479	$120	$144
Age pension – single	$238	$60	$71
Age pension – couple	$337	$84	$101

2 Recommended housing affordability benchmarks for Subiaco

Many different affordability benchmarks have been calculated here for different social groups, different tenure groups and for households and individuals in different life circumstances.

The affordability benchmarks that are recommended for the City of Subiaco are based on the household income profiles of different tenure groups for the total Western Australian population included in Table 3.2. It is recommended that the income profiles for Western Australia be adopted, not those for the current Subiaco population as this provides a better measure of exactly which groups Subiaco is affordable to.

The affordability benchmarks calculated in Table 3.6 for those in receipt of Centrelink pensions and

allowances, and Table 3.7 for the Henderson Poverty Lines, are clearly too low for many individuals to purchase any form of private rental accommodation without experiencing substantial financial housing stress. The affordability benchmarks of Tables 3.6 and 3.7 are more appropriate for a consideration in relation to social housing[21] only.

Of the various household income profiles examined as part of this study (and included in Table 3.1) it is recommended that two affordability benchmarks be used, based on the household income distribution for the total Western Australia population in the ***private rental market*** and for those ***households with a mortgage.***

it is recommended that two affordability benchmarks be used, based on the household income distribution for those in the *private rental market* and for those *households with a mortgage*

The rationale for this recommendation is based on the following considerations:

- the use of the household income profile for *all* households in the City of Subiaco is inappropriate because it contains a significant number of people who own their home outright, but may have low incomes ("*asset rich, income poor*")
- use of the income profile for all households also masks the stark income differences between renters in Subiaco and those purchasing a home
- the use of two separate affordability benchmarks for renters and purchasers recognises a key characteristic of Subiaco - that is, its historical social mix with both low income and higher income residents
- the use of the household income profile for all households renting in the *private* sector is more appropriate than using the income profile of *all rental* households, because of the characteristics of social housing. Most forms of social housing link rental payments to income, often using a standard

[21] 'Social housing' covers housing provided on a by public housing authorities and other agencies on a not-for-profit basis to households and individuals on a needs basis. This includes housing for special groups such as those with a disability. Rent is generally tied to a fixed percentage of income, commonly25 per cent.

benchmark such as 25 per cent. As such, affordability of social housing is generally not a major issue

Accordingly, it is recommended that two housing affordability benchmarks be adopted for the City of Subiaco:

(i) rental affordability based on 25 per cent of the 40th percentile of the income distribution of all renters in Western Australia in the private sector. As indicated in Table 3.2, this affordability benchmark is $135 per week.

(ii) an affordability benchmark for purchasers based on 30 per cent of the 40th percentile of the income distribution for all households in Western Australia with a mortgage. This figure is $286 per week.

These affordability benchmarks preserve the criteria embodied in the original considerations of housing affordability of the National Housing Strategy. By basing the benchmarks of the total Western Australian population, they also allow inclusion of families anywhere in the state who may aspire to live in Subiaco, rather than simply considering those who have already been able to enter the various housing markets in the municipality.

It is recognised that these affordability benchmarks they take no account of family size or other circumstances in determining housing costs. However, as the review of affordability measures has indicated, it is very easy to create complex indices and benchmarks which are difficult to understand, and difficult to measure from easily accessible data sources.

While the two affordability benchmarks cited above are the standard ones recommended, some of the other affordability benchmarks related to households and individuals in different life circumstances will be used later in this report to provide greater detail on aspects of affordability.

Chapter 4

Housing stress in Subiaco

4.1 What does affordable housing mean in Subiaco…

The story so far…

In Chapter 3, the concept of affordable housing was explored from a general perspective, as well as what affordability means in the context of the income profile of Western Australian residents.

The affordability benchmarks established in Chapter 3 were based on the household income profile for Western Australia at the time of the 2001 Census.

Housing affordability is essentially about the relationship between income and housing costs. The only viable source of data on these two variables is from the Census.

This Chapter examines housing affordability in Subiaco using two different, but complementary, data sets. Published Census data have some information on housing costs in different tenure groups, and also some information on income of different household types (eg families with children). However, to obtain information on the

critical relationship between the two it is necessary to purchase special cross-tabulations from ABS, or to purchase some standard cross-tabulations that ABS produce which show the proportion of households in different geographic areas (suburbs, postcodes, municipalities etc) spending over 30 per cent of income on housing.

The latter data set (households spending over 30 per cent of income on housing) is the first of two examined in this Chapter. These data are examined in Section 4.2. It should be noted, however, that the ABS data used in Section 4.2:

- apply the 30 per cent of income threshold to all tenure groups, and these data cannot be used to determine what proportion of renters pay more than 25 per cent of income in rent
- relate to all households, not to households in the bottom 40 per cent of incomes. These data could, therefore, include some affluent households who 'over-consume' housing without experiencing financial housing stress.

Because of these limitations, these measures are referred to in this analysis as *crude* measures of housing stress.

This analysis gives a much more precise picture of just how much Subiaco residents pay for their housing [and gives] … a very clear picture of *housing stress* in Subiaco

The second data set used in this analysis gives a much more precise picture of just how much Subiaco residents pay for their housing. It relates specific information on incomes to specific details of housing costs. As such, it can be used to extract information about housing costs for lower income groups (specifically households below the 40th percentile of incomes). Because of this detail, it enables us to get a very clear picture of *housing stress* in Subiaco, especially amongst low income households. The analysis of this second data set from the 2001 Census is contained in Section 4.3.

4.2 Crude measures of financial housing stress: how many pay more than 30 per cent of income on housing?

One of the standard analyses of housing data undertaken by ABS relates to the proportion of households paying more than 30 per cent of household income on mortgage repayments. It is understood that these data are widely used by the banking and finance industries in relation to home loans.

As indicated above, these data are of limited value for a detailed picture of financial housing stress in Subiaco as they use a 30 per cent of income measure for ***all*** tenures and they are not restricted to modest income earners in the bottom 40 per cent of incomes. As such, these data provide only a crude measure of housing stress.

Tables 4.1 and 4.2 contain details of the proportion of households in each of Subiaco's designated suburbs paying in excess of 30 per cent of household income in either mortgage repayment (Table 4.1) or rent (Table 4.2). It should be noted that these tables relate to households at ***all*** income levels, not just those in the bottom 40 per cent of incomes.

(1) Mortgaged dwellings

19.1 per cent of [all Subiaco] households with a mortgage in 2001 were paying in excess of 30 per cent of household income to service the mortgage.

The City of Subiaco has a relatively high proportion of households with a mortgage who pay more than 30 per cent of household income. For the City of Subiaco as a whole, 19.1 per cent of households with a mortgage in 2001 were paying in excess of 30 per cent of household income to service the mortgage. By way of comparison, only 14.7 per cent of all households in Western Australia with a mortgage were paying in excess of 30 per cent of household income.

The proportion of households paying in excess of 30 per cent of income in mortgage repayments varies considerably throughout the City. It is highest in Crawley, where one-third of households with a mortgage pay in excess of 30 per cent of income, to Jolimont, where only 14.5 per cent experience this measure of housing stress.

It should be emphasised that these particular data relate to households with a mortgage irrespective of their income level. While this gives a broad picture of possible housing stress, the analysis included later in this chapter will allow a more precise evaluation of housing stress amongst low income households.

Table 4.1

Mortgaged Dwellings: -
Housing Loan Repayments as Percentage of Household income for Suburbs in Subiaco [C

	Number of dwellings paying less than 30% of Household Income	Number of dwellings paying 30% or more of Household income	Number of dwellings Unable to determine percentage paid in mortgage repayments	Total number of Mortgaged dwellings	Percentage of Households paying 30% or more for mortgage
Crawley	37	24	11	72	33.3
Daglish	72	21	6	99	21.2
Jolimont	50	10	9	69	14.5
Nedlands	518	142	145	805	17.6
Shenton Park	255	62	50	367	16.9
Subiaco	422	130	76	628	20.7
Total Subiaco (C)	**1354**	**389**	**297**	**2040**	**19.1**
Total WA	**154375**	**32486**	**34151**	**221012**	**14.7**

Cells in this table have been randomly adjusted by ABS to avoid the release of confidential data.

Source: 2001 Census of Population and Housing Australian Bureau of Statistics

Table 4.2

Rent Payments as Percentage of Household Income for suburbs in Subiaco [C]

	Number of dwellings paying less than 30% of Household income	Number of dwellings paying 30% or more of household income	Number of dwellings unable to determine percentage paid in rental payments	Total number of Rental dwellings	Percentage of Households paying 30% or more in rent
Crawley	319	293	46	658	45
Daglish	110	76	25	211	36
Jolimont	138	102	12	252	41
Nedlands	449	279	98	826	34
Shenton Park	363	158	63	584	27
Subiaco	853	304	164	1321	23
Total Subiaco [C]	**2232**	**1212**	**408**	**3852**	**32**
Total WA	**107142**	**42939**	**21430**	**171511**	**25**

Cells in this table have been randomly adjusted by ABS to avoid the release of confidential data.

Source: 2001 Census of Population and Housing Australian Bureau of Statistics

(2) Rented dwellings

financial housing stress is more prevalent amongst renters than it is amongst households with a mortgage … almost one Subicao household in three … pays more than 30 per cent of income in rent

A comparison of Tables 4.1 and 4.2 indicates that financial housing stress is more prevalent amongst renters than it is amongst households with a mortgage. Using this crude measure of financial housing stress, one rental household in four (25 per cent) in Western Australia pays more than 30 per cent of income in rent, compared with only 14.7 per cent of those with a mortgage.

A similar picture emerges within the City of Subiaco. Almost one Subiaco rental household in three (31 per cent) pays in excess of 30 per cent of household income on rent, whereas only 19 per cent of Subiaco households with a mortgage pay the same proportion of income to meet housing costs. This finding is consistent with the long-standing premise that renters are more likely than those with a mortgage to experience housing stress through the cost of housing.

In interpreting this picture of possible housing stress, it is important to note that:

- ABS uses a 30 per cent of income benchmark for this data set, not the 25 per cent benchmark recommended for rental accommodation. This may underestimate the very broad index of housing stress amongst renters of all incomes.
- the data include all household incomes not the bottom 40 per cent of households. This means we can anticipate that financial housing stress amongst private renters in the bottom 40 per cent of household incomes will be much higher.
- in comparing the housing stress amongst mortgagees with that experienced by renters, it should also be noted that at the time these data were collected in the 2001 Census, interest rates for home loans were historically low.

Suburban variations within Subiaco

Within the City of Subiaco there is also considerable variation in the proportion of households experiencing possible housing stress from the cost of rental housing. Potential housing stress amongst renters is highest in Crawley, where almost 45 per cent of all rental households were paying in excess of 30 per cent of income for their housing. Given the proximity of Crawley to the University of Western Australia, it is reasonable to assume that a high proportion of these households could be low-income students renting relatively low-cost housing.. More than 40 per cent of rental households in Jolimont also pay in excess of 30 of income in rent.

The suburb of Subiaco experiences the lowest proportion of financial housing stress within the municipality, but there, are, on this broad measure, still 23 per cent of rental households paying in excess of the 30 per cent threshold.

(3) Crude financial housing stress: summary

The data analysed in this section allow us to obtain only a crude measure of housing stress. However, these data suggest that renters in the City of Subiaco, as well as households with a mortgage, appear to have a higher level of financial housing stress than households in the State as a whole.

Renters experience relatively greater housing stress than those with a mortgage, and the proportions of rental households with potential housing stress rises to over 40 per cent in Crawley and Jolimont.

The analysis of ABS data on households paying in excess of 30 per cent of income on housing costs provides a useful, but limited perspective on financial housing stress in Subiaco. In particular, the ABS tables from which this analysis has been drawn do not give any indication of which households are paying more than 30 per cent of income for their housing. Quite clearly, households with very high incomes may well be able to pay 50 per cent or more of household income on housing without any financial stress.

This reflects the so-called 'over-consumption' of housing whereby affluent individuals or families may choose to pay off a mortgage at an accelerated rate.

In Section 4.3, the analysis draws on more detailed Census tables that enable housing costs and household income to be linked directly. This provides much more direct measures of housing stress for modest and low income households.

4.3 Housing costs and income: detailed analysis

To overcome the limitations of the crude measures of housing stress possible from the analysis in Section 4.2, Special Census 2001 tables were purchased from ABS for this study to enable detailed analysis of the relationship between housing costs and household income.

Separate analysis is undertaken below for renters and for those with a mortgage. In both cases, the analysis focuses on households in the bottom 40 per cent of incomes.

Methodology

For both rents and mortgage payments, data for household income and for housing costs were provided by ABS in categories. For example, 15 categories of rental payments were provided in the tables ($0-$24 per week; $25-49 per week, etc up to the highest category of $500 per week and over. Similarly, 17 broad categories of income were provided with finer gradations at the lower end of the income scale ($1-$39 per week; $40-$79 per week) than at the high end of the scale ($1,000-$1,199; $1,200-$1,499 etc).

In order to estimate the percentage of household income expended on housing, the mid-points of these categories were taken. For example, the mid-point of the income grouping $400 -$499 per week was taken as $450; and the mid-point of the weekly rental cost category $150 - $174 per week was taken as $162. For households falling in this cell of the table, rental costs were calculated as 36 per cent of household income ($162 is 36 per cent of $450).

In order to calculate the percentage of household income devoted to housing costs, it was necessary to go through a five-stage process. Details of the methodology employed, together with extracts of the ABS special cross-tabulations from the 2001 Census which were used in this analysis are included in Appendix 1.

(1) Rental housing

For Subiaco renters in the private sector at the time of the 2001 Census, the ABS special cross-tabulations reveal the following characteristics:

- there were 2,421 households in the City of Subiaco in 2001 who provided information to ABS on their income, as well as the amount of rent they paid[22].
- there were 950 households in the bottom 40 per cent of incomes.
- the income of the 40th percentile of households in the private rental sector in 2001 was calculated at $550 per week.

The analysis of the detailed Census data for households in the bottom 40 per cent incomes in the private rental sector reveals a very high level of financial housing stress (Table 4.3). Only 21.4 per cent of these households were paying less than the affordable threshold of 25 per cent of their household income.

Only 21.4 per cent of [private rental households in bottom 40% of incomes] were paying less than … 25 per cent of their household income.

Most households (46.3 per cent) were paying between 25 and 50 per cent of income in rent, and almost one low-income private rental household in three was paying over 50 per cent of household income in rent. By any standards, this is an exceptionally high level of housing stress.

However, some caution must still be exercised in interpreting these results. The detailed analysis reveals that there are small numbers of households paying more in rent than they state they earn as income. Some 6.3 per cent of

[22] Households were excluded if they they had not stated their income, had only partially stated their income, had declared a negative income or said that they had a nil income.

households appear to pay 100 per cent of income or more on rent[23].

There are a number of possible explanations for this phenomenon, mostly related to the significant amount of student accommodation in some parts of the City. It is not uncommon for students to live on savings accumulated from working during university vacations, or their rent may be paid by their parents while the student's income is very low or sporadic.

It must also be remembered that the tables produced by ABS include some random adjustments of figures to protect confidentiality when dealing with table cells which have small numbers.

Table 4.3 also shows the proportion of income paid in rent by private rental households in each of the income bands within the bottom 40 per cent.

there is no income band [in the bottom 40% of renters] in which over half of households meet the affordability criteria of 25 per cent of household income.

This analysis confirms that financial housing stress is experienced across all income bands within Subiaco's private renters in the bottom 40 per cent of household income. It is not confined to a small group of students with extremely low incomes. For example, there is no income band in which over half of households meet the affordability criteria of 25 per cent of household income. Even in the 'top' income band of this group ($500 - $599 per week) only 46.7 per cent of households paid less than 25 per cent of income on rent. For the 169 households with weekly incomes of less than $200, some 85 per cent pay over 50 per cent of income in rent.

[23] It must also be remembered that the tables produced by ABS include some random adjustments of figures to protect confidentiality when dealing with table cells which contain small numbers.

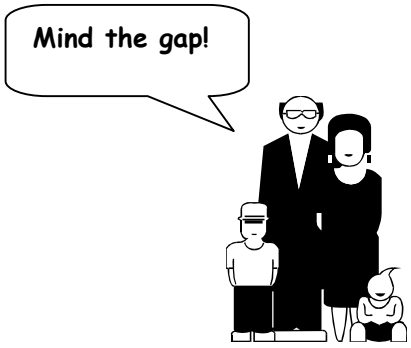
Table 4.3
Low income* Subiaco residents in private rental accommodation, 2001: Proportion of income spent on rent

Weekly household income	Percentage of household income spent on rent				
	0-25%	25-50%	Over 50%	Total	Number of households
$1 - $39	0	0	100	100	6
$40 - $79	0	0	100	100	17
$80 - $119	0	0	100	100	23
$120 - $159	0	7	93	100	42
$160 - $199	4	25	72	100	81
$200 - $299	1	64	35	100	230
$300 - $399	20	55	26	100	184
$400 - $499	42	46	13	100	200
$500 - $599	47	47	7	100	167
Total	**21**	**46**	**32**	**100**	**950**

* Table includes private rental households in bottom 40% of household incomes
Source: Calculated from special cross-tabulations, Census 2001

Affordability gaps

With such a high proportion of households paying more than 25 per cent of income on private rents, it is important to quantify the affordability gaps faced by these households. Affordability gaps have been calculated for each of the nine income groups in the bottom 40 per cent of rental households for each of the 15 categories of rents used by ABS. In all cases, the calculations have been based on the mid-point of the groups.



Calculating affordability gaps: an example

The following process was adopted to calculate the affordability gap for households. This example is based on households with an income of $400 - $499 per week and rental payments of $150 - $174 per week.

- The mid-point of the income group $400 - $499 per week was taken as $450, and the mid-point of the rental category $150 - $174 per week was taken as $162.
- 25 per cent of an income of $450 per week equates to an 'affordable' rent of $112.50.
- When the 'actual' rent of $162 is subtracted from the affordable rent of $112.50, there is an affordability gap of $49.50 (rounded up to $50 per week).

The affordability gaps for the bottom 40 per cent of income earners in the private rental market in the City of Subiaco are included in Appendix 2.

52 per cent of low income private renters paying in excess of 25 per cent of housing income on rent had affordability gaps of greater than $50 per week

This analysis enables some sharp quantification of the affordability gaps of private renters in Subiaco. Overall, 52 per cent of low income private renters paying in excess of 25 per cent of housing income on rent had affordability gaps of greater than $50 per week.

Private rental households with affordability gaps over $50 per week are not confined to the very lowest income bands within the 40th percentile group. For example, some 48 per cent of households in the top income bracket of this group ($500 - $599 per week) who were paying in excess of 25 per cent of income in rent, had affordability gaps of more than $50 per week (Table 4.4).

Table 4.4

Private rental households in the bottom 40 per cent of incomes who pay over 25 % of income in rent and have an affordability gap of more than $50 per week.

Income group	% of those in housing stress with gap of more than $50 per week
$1 - $39	50
$40 - $79	100
$80 - $119	100
$120 - $159	93
$160 - $199	74
$200 - $299	35
$300 - $399	43
$400 - $499	56
$500 - $599	48
Total	**75**
Number of households	**388**

Summary: affordability and low income renters

Of private renters in Subiaco in the bottom 40 per cent of incomes:

- 21 per cent pay affordable rents of less than 25 per cent of income
- 79 per cent appear to experience financial housing stress
- of those in private rental households in financial housing stress over 50 per cent have an affordability gap of more than $50 per week.

Rent assistance

Rent assistance provided by the Commonwealth Government through Centrelink to low income households is an important means for many people to bridge, or partially bridge the affordability gap.

Rent assistance is provided to various low income groups, including those in receipt of a pension, or receiving more than the base rate of Family Tax Benefit. The amount paid depends on individual

and family circumstances, as well as the amount of rent paid. The maximum payment per fortnight ranges from $62 for a single person with no dependents in shared housing, to almost $124 per week for a couple with three or more children.

Data for the take-up of Rent Assistance in the western suburbs shows that, in June 2001, some 2,881 households in the postcodes of 6008, 6009 and 6014 were in receipt of rent assistance.[24] Of these, almost two-thirds were paying low rentals of less than $111 per week. Overwhelmingly these payments were to single person households, although for rentals over $168 per week, payments to single parents with dependent children outnumber payments to single person households.

The number of households receiving rent assistance is of such magnitude that it should really be taken into account in considering the affordability of housing in Subiaco. In Chapter 5, where the affordability of the private rental market in Subiaco is examined in some detail, some allowance is made for the role of Rent Assistance in mapping the affordable housing stock.

(2) Households with a mortgage

The detailed analysis of Subiaco households with a mortgage confirms the earlier finding that financial housing stress is much less common amongst those buying a home than it is amongst private renters.

For Subiaco households with a mortgage at the time of the 2001 Census, the ABS special cross-tabulations reveal the following characteristics:

- there were 1,241 households with a mortgage of which 1,098 provided information on household income as well as housing loan repayments
- there were 445 households included in the analysis of the bottom 40 per cent of incomes for households with a mortgage

[24] Data supplied courtesy of Department of Housing and Works, Office of Policy and Planning

- the income of the 40th percentile of Subiaco households with a mortgage was calculated as $1,326 per week.

Some 38 per cent of [low & moderate income] households pay in excess of 30 per cent of household income in loan repayments

The analysis of the detailed Census data for households in the bottom 40 per cent of incomes for households with a mortgage reveals a significant amount of financial housing stress. Some 38 per cent of these households pay in excess of 30 per cent of household income in loan repayments. Over 11 per cent of these low income households pay over 50 per cent of household income in loan repayments.

Affordability gaps

In keeping with the earlier analysis for households in the private rental market, affordability gaps have been calculated for those households paying more than 30 per cent of income in loan repayments.

The affordability gaps for low income mortgagees in Subiaco are included in Appendix 3. Only those cells for which the Census recorded actual Subiaco households with those income and loan repayments characteristics have been included in this table. In other words, theoretical affordability gaps have been excluded.

Over half of all households who paid over 30 per cent of income in loan repayments had an affordability gap of over $50 per week. This represented 88 households in Subiaco.

Just on one-third of households who paid over 30 per cent of income in loan repayments had an affordability gap of over $100 per week. This represented 56 households in Subiaco.

Summary: affordability and low-income mortgagees

Of households with a mortgage in Subiaco in the bottom 40 per cent of incomes:

- some 62 per cent have 'affordable' housing loan repayments of 30 per cent of household income or less

- 38 per cent appear to experience financial housing stress
- of those mortgagees in financial housing stress, over 50 per cent have an affordability gap of more than $50 per week.

Chapter 5

Private rental in Subiaco: Costs and affordability

5.1 Affordable housing and the private rental market

Individuals and households in the private rental market are generally more vulnerable to financial housing stress than people in other sectors of the housing market.

As indicated in Chapter 3, private rental households have lower incomes than all households. In the City of Subiaco, the median household income of private renters in 2001 was less than half that of Subiaco home purchasers. Renters in public housing and other forms of social housing generally have even lower incomes, but their housing affordability is generally assured through policies which restrict rent to 25 per cent of income.

Within this context, the whole concept of affordable housing cannot be understood without a good picture of the private rental market in Subiaco. While Census analysis enables an aggregate picture of some aspects of housing affordability amongst private renters, it does not provide any detailed information on the private

rental market, especially site information that could be mapped.

Data on advertised vacancies were collected from public sources of information including newspapers .. real estate property lists and real estate websites.

As such, it has been necessary to develop a specific database of private rental housing in the City of Subiaco. This database was compiled by Lee Phillips and Associates over a five month period from August 2002 to January 2003. Data on advertised vacancies were collected from public sources of information including newspapers (local and state), real estate property lists and real estate websites.[25] Rental properties were only included on the database if the following information was available:

- specific address
- size of property (usually number of bedrooms) and
- the rent asked for the dwelling.

Where available, other details were also collected such as dwelling type (flat, house, etc). In all, data were collected for 291 properties in the private rental market.

The focus of this chapter

This chapter provides insights into the private rental market and affordable housing in the City of Subiaco from two different perspectives. The first examines the ***cost*** of privately rented housing in Subiaco using data drawn from the register of rental vacancies developed for this project. This includes analysis of:

- the average costs of rental accommodation advertised during this period
- the costs of different types of accommodation, and
- the rental costs in each suburb within the municipality.

In the second part of this chapter, the affordability of property available for rental is analysed. In particular, the rental data are analysed in the light of the affordability thresholds determined in

[25] Local real estate agents declined to provide details of their rental rolls, commonly citing restrictions in the Privacy Act.

Chapter 3. This analysis enables us to examine the extent to which properties available through the private rental market were affordable to modest and low income families who might aspire to live in Subiaco.

In addition, in Section 5.5 below synthetic estimates of rental costs have been developed for the private rental market in Subiaco. This analysis has been added to the project brief to explore cost-effective ways of estimating housing affordability for on-going monitoring by the City.

5.2 The cost of rental accommodation in Subiaco

(1) Average rental prices

The mean rental price on advertised vacancies over this period was $234 and the median …$220 per week

The mean rental price on advertised vacancies over this period was $234 and the median rental slightly lower at $220 per week.[26] However, given the variation in housing costs for different size units and dwelling types, these overall figures are much more revealing if broken down into sub-groups.

(2) Rent and dwelling size

It is obvious that available rentals with more accommodation will, in general, be more expensive than smaller dwellings. However, the details of the costs of accommodation of different sizes are critical in providing information about the suitability, as well as the affordability, of housing for families and households of different sizes.

In Table 5.1, the mean and median rental prices for different sized accommodation are presented. The median price of rental vacancies in this period ranged from $130 per week for one bedroom units to $295 for dwellings with three or more bedrooms.

Table 5.1 Private rentals, City of Subiaco, 2002

No. of bedrooms	Mean Rental	Median rental	Minimum rental	Maximum rental	No. of dwellings
1	$136	$130	$90	$350	88
2	$219	$200	$100	$500	88
3+	$322	$295	$100	$750	107
Total	**$234**	**220**	**$90**	**$750**	**291**

Source: Compiled by Lee Phillips and Associates

[26] The mean is the arithmetic average of a set of numbers. The median rent is the mid-point in the distribution of rentals: ie 50% of rents were above this figure and 50% below it.

The range of rental costs for these dwelling types is also of interest as there is considerable overlap in the minimum and maximum rents asked for units of different sizes. For example, the rental asked for two-bedroom dwellings ranged from $100 per week to $500. Thus, it was possible to pay less for a two bedroom dwelling ($100) than the median price of one bedroom dwellings ($132).

At the other end of the housing cost spectrum it was possible to pay more per week for a two bedroom dwelling ($500) than the median price for all dwellings with three or more bedrooms ($295).

(3) Private rental cost-profiles in Subiaco suburbs

Full details of the cost profile of the private rental market for suburbs within the City of Subiaco are included in table form in Appendix 4. Key elements of the profile of the private rental market in various suburbs have been extracted from this table and presented here to give an overview of Subiaco rentals (Table 5.2).

From a housing cost perspective, it is clear from these data that the majority of relatively low cost rentals are in the suburbs of Crawley and Daglish. Some 47 per cent of all rentals up to $120 per week were located in these two suburbs.

Table 5.2: Locations of rental properties of varying cost

Rent	Over 50% of rental vacancies in price group were located in the Subiaco suburbs* of …
Up to $120	Daglish, Crawley, Subiaco
$120-$135	Subiaco, Shenton Park,
$136-$153	Nedlands, Shenton Park, Subiaco
$154-$180	Subiaco; Shenton Park
$181-$220	Subiaco; Shenton Park
$221-$250	Subiaco; Shenton Park
$251-$275	Subiaco;Daglish
$276-$316	Subiaco
$317-$379	Subiaco
$380 & over	Subiaco

* Note: suburbs are listed in order of number of rentals within each price bracket

Table 5.3: Rental profiles of Subiaco suburbs

Over 50 % of the rents for the following suburbs were under …	… $ per week
Crawley	$154
Daglish	$154
Jolimont	$180
Nedlands	$180
Shenton Park	$220
Subiaco	$316

Table 5.3 looks at these rental data from another perspective by determining the approximate median price for each suburb. These range from $154 per week in Crawley and Daglish, to $316 per week in Subiaco.

There is a clear pattern of where different private rentals of different costs are located. As rental costs increase, more of the higher cost properties are located in the suburbs of Subiaco and Shenton Park. Thus, over 80 per cent of all the rental vacancies at more than $275 per week were located in these two suburbs.

Another useful insight into the costs of the private rental market in various suburbs is to look at what proportion of the rental vacancies in each suburb were less than the municipality's median rental of $220 per week. These data are presented in Table 5.4.

Table 5.4 Rental vacancies less than $220 per week by suburb

Suburb	% of rental vacancies under $220 per week
Crawley	79
Daglish	67
Jolimont	89
Nedlands	68
Shenton Park	55
Subiaco	38

5.3 Private rentals in Subiaco: Are they affordable?

(1) Private rentals and affordability thresholds

The affordability of the private rental market in Subiaco focuses on those households in Western Australia in the bottom 40 per cent of incomes. In terms of the private rental market the critical question is: *how many of the advertised vacancies in the private rental market in Subiaco are affordable to a household in the bottom 40 per cent of incomes?*

The focus on the bottom 40 per cent of household is in line with the accepted measures of housing affordability discussed earlier in this report.

From the analysis in Chapter 3, it was recommended that an appropriate affordability benchmark for households in the private rental market was $135 per week for Western Australia households. This was marginally below the affordability threshold for current Subiaco renters of $138 per week.

Using these affordability thresholds, only the bottom 20 per cent of the rentals were affordable to Western Australian households in the private rental market who might aspire to live in Subiaco.

It is a telling indicator of the lack of affordable housing in Subiaco that the affordability threshold of $135 per week is less than the mean rental for one bedroom dwellings in the municipality of $136. The affordability threshold is only marginally above the median rent demanded for one bedroom vacancies in this period ($130 per week).

… Low income renters who aspire to live in … Subiaco are highly unlikely to be able to afford anything but a one bedroom dwelling.

In other words, low income renters who aspire to live in the City of Subiaco are highly unlikely to be able to afford anything but a one bedroom dwelling. Privately rented accommodation in Subiaco for families or households requiring two or more bedrooms is extremely problematic. In fact, there were only three properties with two bedrooms available for rent at less than $135 per week and only one three-bedroom dwelling.

(2) Private rentals and households with different life circumstances

To evaluate the affordability of rental vacancies in Subiaco for households in different life circumstances, it is useful to reproduce the affordability thresholds that were developed in Chapter 3 of this report (Table 5.4).

The second-last column of Table 5.5 identifies the proportion of the total private rental market affordable to each of these groups had they been seeking accommodation from the advertised vacancies in the City of Subiaco during the time this study was conducted. However, much of this lower cost accommodation is only one bedroom and unsuitable for families, or any household other than a single person or couple. The right hand column of Table 5.5 shows the proportion of three-bedroom accommodation available to people at different thresholds.

Table 5.5: Affordability: selected groups / life circumstances

Social group/life circumstance	Income (or income of 40th percentile)	25% of income (or 25% of income of 40th percentile)	Proportion of advertised private rentals in Subiaco affordable to group (%)	
			All dwellings	3 bedroom dwellings
All households in WA	$631	$158	**30**	**1**
All privately renting households in WA	$539	$135	**22**	**1**
Privately renting, couple family with children (WA total)	$756	$189	**41**	**1**
Privately renting, couple family without children (WA total)	$754	$189	**41**	**1**
Privately renting, one-parent family (WA total)	$343	$86	**0**	**0**
Privately renting, 'Other family' (WA total)	$562	$140	**27**	**1**
Over 21/ unemployed/ single(Centrelink)	$223	$56	**0**	**0**
Age pensioner – single(Centrelink)	$245	$61	**0**	**0**
Disability Support Pension (18-20 years/independent) (Centrelink)	$230	$58	**0**	**0**

Source: ABS special cross-tabulations; Centrelink

The assessment is grim of how little of the privately rented housing available for rent in Subiaco is affordable by individuals and household in different life circumstances

Using the affordability threshold set in Chapter 3 of $135 per week for the private rental market, only 22 per cent of Subiaco vacancies would have been affordable to Western Australian households in the private rental market. Only one per cent of three bedroom vacancies would have been 'affordable'.

The households with by far the greatest potential accessibility to affordable rental accommodation in Subiaco are couples, either with children or couples without children. The affordability of Subiaco rental vacancies for couples is almost identical, irrespective of whether or not they have children. Couples in the private rental market in WA who fall on the 40th percentile of incomes could access some 41 per cent of the advertised vacancies in Subiaco without experiencing housing stress.

Only one per cent of three-bedroom vacancies would have been affordable to families with children.

However, the picture is also grim when some measure of housing appropriateness in incorporated. Certainly for families with children, a minimum of two bedrooms, and most commonly three bedrooms would be the norm. Only one per cent of three-bedroom vacancies would have been affordable to families with children.

The situation for one-parent families, and those on a pension or benefit is grim. Not a single vacancy in the private rental market would have been affordable to any single parent in the private rental market in WA whose income was on or below the 40th percentile for one-parent families renting privately. This includes single parents who are working as well as those whose income is derived from Government benefits.

Affordable rents in Subiaco's suburbs

Given the variation in private rental costs in different suburbs, it follows that there are sharp variations in the affordability of the private rental market within the municipality (Table 5.6). This table indicates how much of the private rental

property in each suburb is affordable when the affordability benchmark of $135 per week is used.

The proportion of private rentals that were affordable in the various suburbs ranged from almost 42 per cent of the advertised vacancies in Daglish to just under 14 per cent of the advertised vacancies within the suburb of Subiaco.

Table 5.6 Affordability of private rents by suburb

Suburb	% of advertised vacancies under affordability threshold ($135 per week)
Crawley	39.3
Daglish	41.7
Jolimont	33.3
Nedlands	25.0
Shenton Park	24.2
Subiaco	13.9

5.4 Estimating market rents

The monitoring of private rents in the City of Subiaco using the methodology employed in this project is quite labour-intensive. It would be of considerable value to the ongoing monitoring of affordable housing in Subiaco if synthetic measures could be found to estimate rents.

The municipal rates levied against any particular property are linked directly to the Gross Rental Value (GRV) of a property. This figure is based on periodic valuation of the property by the Office of the Valuer General.

As GRVs are based on the assumed rental potential of each property, it should be theoretically possible to use GRVs to assess affordability. However, it is necessary to test the relationship between market rents and GRVs before this surrogate measure of market rents could be used with any confidence. If the GRV of a property could be used to give a reasonable estimate of the *market rent* that a property could command, this would be invaluable in ongoing

monitoring of affordability by the City of Subiaco. The GRV database is a key component of the ongoing financial operations of the municipality.

Although beyond the initial scope of the project, Lee Phillips and Associates has included an analysis of the relationship between market rents and GRVs in this report as part of the provision of a methodology for monitoring housing affordability.

Methodology

The following methodology was adopted to determine if there is a consistent and significant relationship between private rentals and GRV:

A database for this analysis was generated using:

- the private rental database for this project for properties offered for rent in the City of Subiaco in 2002 for which addresses and rent could be identified, and

- GRV values for these properties extracted from the rate records and GRV database held by the municipality.

The database consisted of 208 properties for which both variables (the market rent and the GRV) were available.

The statistical relationship between these two variables was examined by means of correlation[27] and linear regression analysis utilising Statistical Package for the Social Sciences (SPSS) software.

What is the relationship between private rentals and GRVs?

Correlation coefficients give a measure of the strength of the relationship between two variables.[28] The correlation coefficient for these two variables is +0.810[29] indicating that there is a very strong relationship between market rents and GRV.

[27] A Pearson Product-Moment Correlation Coefficient was used for this analysis..

[28] The size of the product-momemt correlation coefficient (*r*) varies from +1.0 for a perfect positive correlation, to –1.0 for a perfect negative correlation. A coefficient of zero indicates no linear relationship between the two variables.

[29] Significant at the .01 level.

This relationship between market rents and the GRV values is hardly surprising. The underlying assumption of GRVs is the rental potential of a property. Higher GRVs reflect higher property prices and, clearly, more expensive properties can demand higher market rents.

What is surprising is the strength of this relationship. A correlation coefficient of this magnitude for a 'population' of 208 dwellings is an exceptionally strong relationship in statistical terms.

Predicting market rents from GRVs

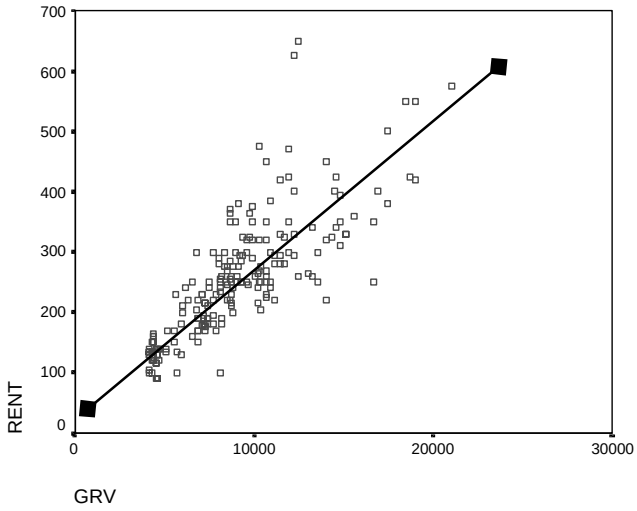
The very strong relationship between market rents and GRVs warrants further statistical analysis so that market rents can be predicted from GRV data.

The statistical technique of linear regression can be used to predict the scores of one variable on the basis of the scores of another variable[30]. In this case, we are interested in predicting the market rental value from the GRV.

Linear regression uses a concept of the line of best fit, which is a line drawn through a scatter diagram of a plot of the two variables in a position which, effectively, puts as many as possible of the plotted points as close as possible to the line. The scatter diagram of the relationship between market rents and GRVs is shown in Figure 5.1.

[30] Downie, N & Heath R (1965), ***Basic statistical methods*** Harper & Row, New York, p95

Figure 5.1: Scatter diagram: market rents and GRVs, Subiaco 2002



The relationship between two variables in a linear regression is expressed in general form as:

$Y' = a + b X$

where:

- *Y*' is the value we want to predict (in this case *market rent*). In statistical terminology this is known as the *dependent* variable.
- *a* is a constant and is the point where the regression line (line of best fit) crosses the *Y* (vertical axis*)*
- b is the slope of the line which relates to how much of an increase (or decrease) there is in the value of the predictor variable for an increase of one in the variable we are seeking to predict. The value of *b* reflects the slope of the line of best fit.
- *X* is the predictor variable. In statistical terminology this is known as the *independent* variable. In this case, GRV is the predictor variable.

The linear regression analysis for market rents and GRVs produced the following result:

$Y' = 40.939 + .02351\ X.$

Expressed in non-statistical terms, this means that the estimated market rent of a property (*Y'*) is $40.939 plus $.02351 for every dollar of GRV (values of GRV are designated as *X* in the above equation). For example, if the GRV of a property is $10,000, the estimate of the market rent of that property would be $276 per week ($40.938 + $.02351 multiplied by $10,000).

To further illustrate the utility of these synthetic estimates of private rentals, a random selection of rental properties has been generated from the database with the actual current rent and the estimated rent (using GRV formula above) shown (Table 5.7).

Table 5.7 Relationship between actual rents and synthetic estimates for random sample of Subiaco rental properties

Property type	Number of beds	Current actual rent	Synthetic estimate of rent	% error
House	2	$270	$283	4.8%
House	3	$295	$304	3.1%
House	3	$240	$249	3.8%
Town House	2	$190	$210	10.5%
Town House	3	$230	$246	7.0%
Unit	2	$330	$328	0.6%
House	4	$500	$450	10%
Unit	1	$135	$138	2.2%
Unit	2	$200	$183	8.5%
House	3	$250	$246	1.6%

The "error" in the above synthetic estimates ranges from 0.6% to 10.5%. This reflects the

variable nature of the rental market and the fact that market rents reflect many factors: - length of lease, furnished or unfurnished, condition of property, standard of décor and finish, provision of extra services included in rent eg gardening, lawn-mowing, servicing of apartments. As an example, some similar properties with the same GRV attract varying rents, as shown in Table 5.8 below.

Table 5.8 Example of similar properties with same GRV attracting different rents

Property type	Number of beds	GRV	Synthetic estimate	Actual rent
Town House	2	$7696	$222	$180
Town House	2	$7696	$222	$195
Town House	2	$7696	$222	$220

It should be noted that for some outliers in this analysis, the relationship between actual rent and the synthetic estimate based on GRV will not be a close one. An outlier is a point on the scatter diagram far from the line of best fit. As an example, the synthetic estimate of rent for one four bedroom house in the database which has a GRV of $9048 is $254 per week. However, this particular property charges a rent of $750 per week due to certain extras which have no relation to GRV; in this instance this property is fully furnished and equipped and serviced weekly.

Implications for future monitoring of market rents

The ability of GRV values to be a reasonable predictor of market rents, offers the City of Subiaco a cost-effective means of broadening its analysis of affordable housing in the private rental market by means of data it already possesses through its rates records.

There is, however, no way of knowing from this preliminary exploration of market rents and GRVs how stable the relationship between the two will be over time. Common sense suggests that the relationship will always be a strong one. However, over a period of, say, two or three years, broader forces at work in the private rental

market and/or in the value of land, may either depress the market rent potential of properties of any given GRV, or increase them beyond the relationship that has been measured here.

5.5 Mapping affordable housing

In light of the value of strong relationship between market rents and GRV, the mapping of affordable housing has been based on GRV values rather than the limited private rental database that was generated from vacancies in late 2002.

By using the formula for estimating market rents from GRV values, it is possible to 'work backwards' from an affordable rent to the GRV of properties that would approximate that affordable rent.

From section 5.4 above, the relationship of GRVs to the estimated market rent was expressed statistically as:

$Y' = 40.939 + .02351\ X.$

In this general form, the symbol *Y'* is the estimated rent derived from a data set where we know the GRV values of all properties.

In mapping affordable housing using GRV values, we are working the other way. Instead of seeking to estimate the value of *Y'* (the market rent of a property) we can substitute *Y'* with the affordable rent. In Chapter 3, an affordable rent was set as $135 per week, which is 25 per cent of the income of the 40th percentile of all private renters in Western Australia in 2001. This allows us to calculate the GRVs of properties that, if they were to be made available to the private rental market, would rent for around the affordable rent determined as appropriate for Subiaco.

Reworking the equation from the regression analysis to determine the GRV of properties that should rent for $135 per week takes the following form:

$X = (\$135 - 40.939) / .02351$ (where *X* is the GRV value).

Therefore, X = $4,000.89.

This means that any property in Subiaco with a GRV of $4,000 is likely to be let at a market rent that is affordable to any Western Australian in the private rental market providing they have an income equivalent to the 40th percentile income of all renters in Western Australia.

However, in mapping affordable housing in the private rental market in Subiaco it is also important to take account of the issues of Rent Assistance discussed in Chapter 4. If no allowance for Rent Assistance is made, the picture housing affordability in Subiaco for low income groups could be portrayed as more severe than it is in practical terms.

Without access to detailed records from Centrelink, it is not possible to put an exact figure on the allowance that should be made for Rent Assistance in mapping affordable housing. However, a reasonable estimate can be made based on the following assumptions:

- the majority of households receiving Rent Assistance are single person households
- for a single person meeting the income eligibility criteria for Rent Assistance, payments cut out if rent is less than $41 per week and the maximum payment of $47 per week is paid if rent for a single person is more than $104 per week
- a significant amount of one bedroom accommodation is available in Subiaco for around $90 per week, therefore such tenants would not be eligible for the maximum amount of Rent Assistance

A conservative estimate of the impact of Rent Assistance would suggest that it is reasonable to raise the affordability 'bar' from a rental of $135 per week to $150 per week. This would allow the mapping of affordable housing and 'near affordable' housing that should be accessible to low or modest income households who are eligible for at least partial Rent Assistance payments.

Inserting a weekly rent of $150 per week into the formula linking rents and GRVs, yields a GRV of $4,639. Dwellings with a GRV of $4,639 or less have been mapped as part of the pool of affordable housing in Subiaco.

While not all of these properties are currently in the private rental market, individual properties do move in and out of the rental pool at different times. If a Subiaco property with a GRV of $4,639 or less were to be sold to an investor who wished to rent it out, a market rent for the property is likely to be affordable to households who could only pay $150 per week in rent.

The locations of properties in the municipality that should be let at affordable rents are appended to this report (Map 1).

Chapter 6

Home purchase in Subiaco: Costs and affordability

6.1 Affordable housing and home purchase

Any assessment of the affordability of home purchase in the City of Subiaco presents a separate set of issues and challenges from those related to the private rental market.

Issues related to the affordability thresholds appropriate for people who aspire to live in Subiaco, *and* aspire to home ownership, were examined in Chapter 3 of this report. The income profiles of renters and home purchasers are markedly different. In Chapter 3, analysis of special Census tables revealed that the median income of Western Australian households who were purchasing a home ($1,104 per week) was substantially higher than the weekly household

income of those renting in the private sector ($649 per week). As such, the affordability benchmarks for home purchase are substantially higher than for renting ($286 per week compared with $135 per week) and quite different assumptions about affordability need to be applied to home purchase.

The costs of housing for someone purchasing their home are dependent on, not only the market value of the property, but also the prevailing interest rates which affect mortgage repayments. Mortgage repayments are also affected very much by the size of the purchaser's deposit, as 100 per cent loans are unusual in the banking and home mortgage industries.

There are also considerable challenges in developing an accurate data base for the cost of housing for purchase. The best evidence of the cost of housing are the records of sale price is collated by the Office of the Valuer General (OVG). This project has utilised records obtained from OVG to analyse all residential sales in the City of Subiaco from 1 July 2001 to 30 June 2002. The results of this analysis are outlined in this chapter.

…records of the sale prices and key dwelling characteristics … give an excellent picture of the housing market in Subiaco.

It is not possible to determine from these data whether the properties sold were owner occupied housing or rental properties, either before the sale or after it. However, records of the sale prices and key dwelling characteristics (such as the number of bedrooms, bathrooms and other features) give an excellent picture of the housing market in Subiaco. The OVG records also offer a cost-effective means of ongoing monitoring of this aspect of housing affordability in Subiaco.

Full details of the sales evidence data file are appended to this report (Appendix 5).

The sales evidence data obtained from the OVG were analysed using SPSS software (Statistical Package for the Social Sciences).

The focus of this chapter

This chapter gives insights into the home purchase aspects of affordable housing in Subiaco from two different perspectives. The first examines all housing sales in the City of Subiaco over the

course of a 12 month period (July 2001 – June 2002) and focuses on the ***cost*** of purchasing a dwelling in the City of Subiaco. This includes the analysis of:

- how much of Subiaco's residential stock was sold over the year
- the types of dwelling sold and their size, and
- the sales prices obtained for each dwelling sold, including analysis of the sale prices in each suburb in the municipality.

In the second part of this chapter, the ***affordability*** of property sold in Subiaco is analysed. In particular, the sales data for the City are examined in the light of the affordability thresholds determined in Chapter 3. This analysis enables us to examine the extent to which properties for sale were affordable to modest income families who might aspire to live in Subiaco.

6.2 Home purchase in Subiaco: costs and sale prices

(1) How much of Subiaco's residential stock is sold in a year?

Almost 10% of Subiaco's housing stock was sold in the year 2001-2002

During the financial year 2001-2002, 661 residential properties were sold in the City of Subiaco. This represents 9.4 per cent of the 7,053 occupied private dwellings in Subiaco recorded at the time of the 2001 Census.

The distribution of these sales through the various suburbs of the City of Subiaco is outlined in Table 6.1. Half of all sales were in the suburb of Subiaco, with almost 25 per cent in Shenton Park.

Table 6.1 Residential sales in suburbs, City of Subiaco 2001-2002

Suburb	% of residential sales 2001-2002
Crawley	9.2
Daglish	6.7
Jolimont	4.8
Nedlands	4.5
Shenton Park	24.5
Subiaco	50.1
Wembley	0.2
Total	**100.0**

Source: Valuer General: Sales evidence records, City of Subiaco

(2) Type of property sold

(a) Dwelling type

The nature of the housing stock sold in Subiaco in 2001-2002 is summarised in Table 6.2.

Almost 45% of residential sales in the City of Subiaco for 2001-2002 were separate houses.

Almost 45 per cent of residential sales in the City of Subiaco for 2001-2002 were separate houses, with the majority of sales being opther types of dwellings from town houses, semi-detached houses and terrace houses to flats and units.

Table 6.2: Types of dwelling sold 2001-2002

Dwelling type	Number	Percent
House	295	45
Town house Terrace house Semi-detached	120	18
Town house Terrace house Semi-detached	120	18
Units, Flats Apartment etc	246	37
Total	**661**	**100.0**
Total	**661**	**100.0**

Source: Valuer General: Sales evidence records, City of Subiaco

(b) Size: number of bedrooms

No property sold in … Subiaco in 2001-2002 for less than $181,000 had more than two bedroooms.

Understandably, the properties sold in the lower price groups tend to be mainly one bedroom or two bedroom dwellings. Thus, 83 per cent of sales under $125,000 (the bottom 10 per cent of sale prices) had one bedroom. Table 6.3 details the number of bedrooms in those price groupings under the 2001-2002 median sale price for the City of Subiaco ($340,000).

As would be expected, there is a clear relationship between price and size of dwelling: the lower the price, the greater the likelihood that the dwelling will have only one bedroom. There is a clear and consistent decline in the number of one-bedroom properties with increasing price. Thus, 83 per cent of dwellings sold for under $125,000 had one bedroom whereas only 6 per cent of dwellings in

the $300,000 -$340,000 price group had just one bedroom.

No property sold in the entire City of Subiaco in 2001-2002 for less than the median price of sales ($340,000) had more than three bedroooms.

Only two properties sold in the entire City of Subiaco in 2001-2002 for less than $181,000 had more than two bedroooms.

Table 6.3 Number of bedrooms by price groups under the median sale value.

Bed rooms	Price group				
	$125,000 & under (%)	$126,000 - $180,000 (%)	$181,000 - $$250,000 (%)	$251,000 - $299,000 (%)	$300,000 - $340,000 (%)
1	83	41	25	23	6
2	17	56	51	42	51
3		3	24	35	43
Total	100%	100%	100%	100%	100%

Source: Valuer General: Sales evidence records, City of Subiaco

(3) City of Subiaco: Sales prices 2001-2002

Before determining issues of affordability in residential sales, it is useful to review the ***cost*** of home purchase in Subiaco from the sales evidence.

Sale prices for residential property in the City of Subiaco for 2001-2002 ranged from $47,000 to $1.35 million.

Sale prices for residential property in the City of Subiaco for 2001-2002 ranged from $47,000 to $1.35 million. The properties at both the lower and upper end of this range are certainly 'outliers', that is, they are single sales with no other properties, or relatively few, in the same price range.

In the case of the bottom range, the next lowest sales price was $63,500. At the top end of the market, the property that sold for $1.35 million was clearly in a class of its own with the next most expensive property being $310,000 cheaper.

The mean sales price[31] for residential property in Subiaco for this period was almost $347,000 with the median sales price[32] slightly lower at

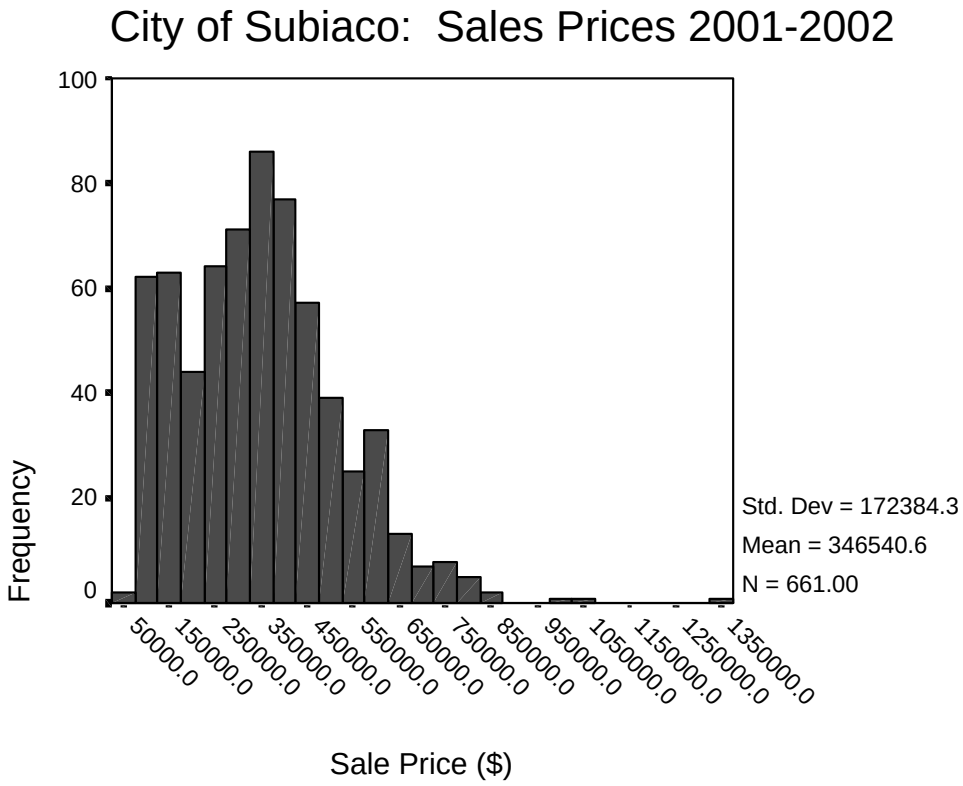
[31] The mean sales price is the arithmetic average of all sales.

[32] The median sales price is the 'midpoint' in the distribution: ie 50% of sales were below this figure and 50% above it.

$340,000. Over two-thirds of all properties sold fell within the price range $174,000 to $520,000.

The distribution of prices over the full range of sales is displayed graphically in Figure 6.1.

Figure 6.1: Frequency distribution of sale prices, City of Subiaco 2001-2002



(3) Where is the affordable housing?

Information on the location of affordable housing is a key output of this project. Housing costs have been analysed in this project at two levels: first at an aggregate level (suburb by suburb), and secondly through the mapping of individual sites that meet specific criteria of affordability. The mapping of specific sites is addressed later in this chapter.

Aggregate (suburb by suburb) analysis

Full details of the cost profile of housing sales for suburbs within the City of Subiaco are included in table form in Appendix 6. In this appended table the sales data have been broken into 10 price bands (deciles). Each decile has approximately the same number of sales in it (66).

Key elements of the profile of sales in various suburbs have been extracted from this table and presented here to give an overview of Subiaco sales (Tables 6.4 and 6.5).

Table 6.4 Location of sales in different price bands

Sale price ($'000)	Over 50% of sales in price group were located in the Subiaco suburbs* of …
Up to $125	Subiaco; Crawley
$125-$180	Shenton Park; Jolimont**
$181-$250	Subiaco
$251-$299	Subiaco
$300-$340	Subiaco; Shenton Park
$341-$378	Subiaco
$379-$420	Subiaco; Shenton Park
$421-$475	Subiaco; Shenton Park
$476-$580	Subiaco
$581 & over	Subiaco

*Note: suburbs are listed in order of number of sales within each price bracket
**Jolimont & Subiaco had same proportion of all sales $125,000 -$180,000

Table 6.5: Snapshot of price profiles in Subiaco suburbs

Over 50 % of sales in the following suburbs …	…were under …
Crawley	$250,000
Daglish	$340,000
Jolimont	$180,000
Nedlands	$378,000
Shenton Park	$378,000
Subiaco	$378,000

The commentary that follows on the profile of sales in each of Subiaco's suburbs draws on the full data included in Appendix 6 as well as the summary information included in Tables 6.4 and 6.5.

(a) Crawley

Crawley emerges from this analysis as a suburb with a considerable amount of lower cost housing sold in 2001-2002. More of Crawley's sales fell in the lowest decile ($125,000 and under) than in any other price group. In all, almost 46 per cent of Crawley's housing sales were in the bottom two deciles, and over 72 per cent were under $250,000 (the bottom three deciles). Much of this reflects the number of small flats in those parts of the City of Subiaco close to the University of Western Australia.

The contrasting values of housing in Crawley are reflected in the fact that almost 10 per cent of its sales in 2001-2002 were in the top two deciles (over $476,000).

(b) Daglish

Daglish's housing sales during 2001-2002 are spread relatively evenly over the different price groupings. The median price of housing for Daglish was almost identical to that of the total sales in the City of Subiaco with Daglish having 49.6 per cent of its sales under $340,000.

However, the biggest proportion of Daglish's sales in any decile was in the price range $341,000 to $378,000, where 25 per cent of the all sales in the suburb were concentrated.

Daglish had only two sales (4.6 per cent) in the top 20 per cent of sales prices (over $476,000).

(c) Jolimont

Jolimont is the suburb within the City of Subiaco with the highest concentration of low cost sales in 2001-2002.

Jolimont is the suburb within the City of Subiaco with the highest concentration of low cost sales in 2001-2002. In all, over 81 per cent of all sales in Jolimont were in the bottom 20 per cent of sales prices (under $180,000).

Although Jolimont contributed to only 4.8 per cent of all housing sales in the City of Subiaco in 2001-2002, its sales made up over 17 per cent of all sales under $125,000 and some 22 per cent of all sales between $126,000 and $180,000 (decile 2).

Jolimont had only one property sold in 2001-2002 for more than $340,000, the median sale price of all housing in the City of Subiaco.

(d) Nedlands

The small part of Nedlands that falls within the City of Subiaco made up less than five per cent of all sales in 2001-2002.

Sales in Nedlands were spread over most of these decile price groupings. Like Daglish, Nedlands' sales were very similar to those of the City of Subiaco as a whole. Nedlands had 49.9 per cent of its sales in 2001-2002 under the median price of $340,000 noted earlier for all sales.

Nedlands had more of its sales in the range of $300,000-$340,000 (the price bracket just below the municipality's median sales price of $340,000) than in any other price group. Some 23 per cent of all Nedlands sales fell into this price range.

(e) Shenton Park

Almost one-quarter of all sales in the City of Subiaco in 2001-2002 were recorded in Shenton Park. Despite its numerical significance in overall sales, only 10 per cent of all the City's sales under $125,000 were in Shenton Park. However, almost one-third of all sales in the second decile ($126,000 to $180,000) were from Shenton Park.

Almost one-quarter …of Shenton Park's sales were …over $476,000.

Overall, Shenton Park emerges from this analysis as more expensive than the overall profile of sales in the City of Subiaco. Only 41 per cent of all its sales were under the median sale price for the City as a whole ($340,000). Almost one-quarter (22.3 per cent) of Shenton Park's sales were in the top two deciles (over $476,000).

(f) Subiaco

The suburb of Subiaco dominates the sales data for the City as a whole with 50 per cent of all sales in 2001-2002.

Like Shenton Park, Subiaco is somewhat more expensive than the City as a whole. Subiaco had

just under 45 per cent of its housing under the City's median sales price of $340,000, and only 12.4 per cent of its sales in the bottom two deciles (under $180,000).

The suburb of Subiaco recorded a significant proportion of high cost sales, with 71 per cent of all of the City's sales in the top 25 per cent of sale prices (over $580,000). Almost one quarter (23.7 per cent) of the suburb's sales in 2001-2002 were in the top 20 per cent of sales prices for the City as a whole with sale prices over $476,000.

(g) Wembley

A very small part of the suburb of Wembley falls within the City of Subiaco. This area recorded only one sale in 2001-2002 which fell in the price group $476,000 to $580,000.

Summary: suburb by suburb analysis

The suburbs within the City of Subiaco are very different in terms of their housing profiles and the patterns of sale prices recorded in 2001-2002.

Jolimont and Crawley are suburbs with the highest proportions of their stock (or, at least, their stock sold in 2001-2002) in the lowest price ranges.

While the suburb of Subiaco emerges from this analysis as relatively more expensive than other suburbs, it still had a significant proportion of all low cost housing. Similarly, sales in Shenton Park were relatively more expensive that those in the City as a whole, yet Shenton Park had almost one-third of all sales in $126,000 to $180,000 price group (decile 2).

…relatively low-cost housing can be found in all parts of … Subiaco. This housing diversity is one of the reasons Subiaco has enjoyed its traditional social mix.

This analysis suggests that relatively low-cost housing can be found in all parts of the City of Subiaco. This housing diversity is one of the reasons Subiaco has enjoyed its traditional social mix.

6.3 Home purchase in Subiaco: is it affordable?

(1) Affordability and home ownership

If the City of Subiaco wishes to maintain its traditional social mix, with residents drawn from a range of income and social groups, a key question is *just how affordable is home purchase in Subiaco?*

This is particularly relevant in addressing the issue raised in the project brief regarding affordability for households who may *aspire* to live in Subiaco. To answer this question as far as home purchase is concerned, it is necessary to apply the affordability thresholds developed in Chapter 3 of this report to the evidence of housing costs revealed by the sales data.

It goes without saying that the choice of where a family or household wishes to purchase a home is not just a question of affordability. However, if housing in Subiaco is unaffordable to modest income households, then other considerations in the choice of where to live become irrelevant.

(2) Determining affordability in mortgage repayments

As noted at the beginning of this chapter, the affordability of a home mortgage depends on three key factors:

- the purchase price of the property
- the prevailing interest rates of the home loan, and
- the deposit the purchaser is able to contribute to the total purchase price.

Clearly, the larger the deposit, the smaller will be the loan, and this will be reflected in the 'affordability' of the payments. Our analysis of the affordability of home purchase in the City of Subiaco, is based on the assumption of a 10 per cent deposit. This is broadly in line with what financial institutions would normally expect.

Entry costs to home ownership

Just as there are entry costs for rental housing, especially bond money and rent in advance, so too, there are entry costs for home purchase. These entry costs can make *accessibility* to home ownership difficult, even if mortgage repayments are 'affordable'. For home ownership, the main entry costs relate to Stamp Duty on the purchase price, as well as bank fees and related costs in the transfer of land.

To avoid over-complicating the methodology, entry costs to home ownership have not been factored into the analysis of affordability for home purchase. To some extent, the entry costs of home purchase are partly ameliorated by the commonly available 'honeymoon' interest rates, whereby the first six or 12 months of a loan may be offered at discounted rates. These 'honeymoon' rates have also been excluded from the analysis.

Determining affordable mortgages

The affordability of mortgage repayments for home purchase in the City of Subiaco focuses on those households in Western Australia in the bottom 40 per cent of incomes. The question then becomes: *what is a household in the bottom 40 per cent of incomes able to purchase in the City of Subiaco?*

The focus on the bottom 40 per cent of household is in line with the accepted measures of housing affordability discussed in earlier chapters of this report.

The mortgage repayments for various properties in Subiaco were calculated using the loan calculator from the website of a major bank. Mortgage repayments were based on the following assumptions:

- a mortgage of 90 per cent of the sale price (reflecting the 10 per cent deposit discussed above)

- a prevailing interest rate of 6.5 per cent, and
- a loan repayment period of 25 years.

From the analysis in Chapter 3, it was recommended that an appropriate affordability benchmark for households with a mortgage was $286 per week. This figure represents, for all households in Western Australia with a mortgage, 30 per cent of the weekly household income ($954) of those households on the 40th percentile of income distribution[33].

Using these benchmarks, a family earning $954 per week should be able to make mortgage repayments of $286 per week. Repayments of this magnitude would support a mortgage of $184,000[34]. Based on a mortgage being 90 per cent of the sale price (ie: a 10 per cent deposit), then a mortgage repayment of $286 per week would support a home purchase of $204,444. As discussed above, this analysis excludes entry costs such as Stamp Duty.

Further down the income ladder

If we go further down the income ladder and take households on the 20th percentile of household incomes, the size of the mortgage they could support without experiencing financial housing stress drops considerably to around $105 per week. The relevant parameters of these lower income groups are:

• Weekly income of 20th percentile for households with a mortgage	$351
• Affordable mortgage if repayments no more than 30 % of income	$105.per week
• Mortgage supportable on repayments of $105 per week	$75,555
• Purchase price of property with 90% mortgage repaid at $105 per week	$83,950

[33] The 40th percentile represents modest income home purchasers whose incomes are higher than 39 per cent of other households with a mortgage, but have a lower income than 60 per cent of all households with a mortgage.

[34] Based on an interest rate of 6.5% and a 25 year repayment period.

(3) Relating affordable mortgages to property prices in Subiaco

Having established the size of a mortgage that a modest income earner in Subiaco could support without experiencing financial housing stress, the question remains as to what property, if any, they could buy in Subiaco with an 'affordable' mortgage.

For the 'modest' income mortgagees (40th percentile) able to support a mortgage for a property bought for less than $204,000, only 23.4 per cent of all sales in the City of Subiaco were 'affordable'. This means that the vast majority of sales in Subiaco were not an option for modest income households without experiencing considerable financial housing stress.

Only three dwellings sold in the City of Subiaco in 2001-2002 were 'affordable' for low-income households

For low-income households (20th percentile for WA) the picture is bleak. Their affordability threshold can only support a mortgage of less than $84,000 without experiencing financial housing stress. Using these criteria, only three dwellings sold in the City of Subiaco in 2001-2002 were 'affordable' for low-income households.

As previously highlighted, none of this analysis takes account of whether or not housing that is 'affordable' to these income groups is appropriate to their needs in terms of size and other dwelling characteristics. When the affordability of three bedroom accommodation is examined, an even bleaker picture of affordability emerges (Table 6.6).

The most affluent of the social groups, or people with different life circumstances, included in the above analysis are couples without children who are purchasing a home. Based on mortgage repayments of 30 per cent of the income of the 40th percentile of this group, only 10 per cent of three bedroom dwellings sold in Subiaco in 2001-2002 would have been affordable.

Table 6.6: Affordability: selected groups / life circumstances

Social group/life circumstance	Income (or income of 40th percentile)	30% of income (or 30% of income of 40th percentile)	Mortgage repayments of 30 % income could support purchase of:	Proportion of sales in Subiaco affordable to group (%)	
				All dwellings	3 bedroom dwellings
All households in WA	$631	$189	$134,000	**12**	**0**
All households in WA with mortgage	$954	$286	$204,000	**23**	**2**
Home buyers, couple family with children (WA total)	$1006	$302	$252,000	**31**	**8**
Home buyers, couple family without children (WA total)	$1038	$311	$260,000	**33**	**10**
Home buyers, one-parent family (WA total)	$489	$147	$104,000	**1**	**0**
Home buyers 'Other family' (WA total)	$843	$253	$151,000	**15**	**0**
Over 21/ unemployed/ single(Centrelink)	$223	$67	$44,000	**0**	**0**
Age pensioner – single(Centrelink)	$245	$74	$47,000	**0**	**0**
Disability Support Pension (18-20 years/independent) (Centrelink)	$230	$69	$45,000	**0**	**0**

Source: ABS special cross-tabulations; Centrelink

The key affordability benchmark threshold identified in Chapter 3 (for all households in Western Australia with a mortgage) was $286 per week. Using this benchmark, only two per cent of Subiaco's three bedroom accommodation would have been 'affordable' to households who are currently purchasing a home somewhere in the State.

6.4 Estimating sales prices

In Chapter 5, a very strong link was found in the statistical relationship between advertised market rents in Subiaco and the Gross Rental Value (GRV) of a property. This relationship was used to generate synthetic, or estimated market rentals for all properties in the City, and to broaden the assessment of just how much housing is affordable.

In this section, the same techniques are used to estimate the sales price of all properties in the City of Subiaco. Clearly, not all properties in Subiaco are available for sale. However, using the sales evidence of 2001-2002 as a reference point, this analysis could potentially estimate the sale price of a property if it were to be sold. The affordability benchmarks for home purchase, established in Chapter 3, could then be applied to the total housing stock of the municipality.

Methodology

The methodology was adopted to determine if there is a consistent and significant relationship between dwelling sales prices and GRV mirrors that used in Section 5.4 for the private rental market:

A database for this analysis was generated using:

- the dwelling sales database for this project obtained from the OVG for sales in the City of Subiaco 2001-2002, and

- GRV values for these properties extracted from the rate records and GRV database held by the municipality.

The database consisted of 534 properties for which both variables (the sale price and the GRV) were available.

The statistical relationship between these two variables was examined by means of correlation[35] and linear regression analysis utilising Statistical Package for the Social Sciences (SPSS) software.

[35] A Pearson Product-Moment Correlation Coefficient was used for this analysis..

What is the relationship between sale prices and GRVs?

Correlation coefficients give a measure of the strength of the relationship between two variables.[36] The correlation coefficient for these two variables is +0.754[37] indicating that there is a very strong relationship between market sales and GRV. This is a marginally lower correlation than that obtained between market rents and GRVs (0.810). However, it is still an exceptionally strong relationship, especially given the size of the 'population' (534 dwellings) compared with the 208 rental properties for which were available on both market rents and GRVs.

As with the private rental analysis, this relationship between sale prices and the GRV values is hardly surprising as higher GRVs reflect higher property prices.

Predicting sales prices from GRVs

The very strong relationship between dwelling sales prices and GRVs warrants further statistical analysis so that sales prices of all properties (and therefore 'affordable' sales) can be predicted from GRV data.

As noted in Chapter 5, the statistical technique of linear regression can be used to predict the scores of one variable on the basis of the scores of another variable[38]. In this case, we are interested in predicting the sale price of a dwelling from the GRV.

Linear regression uses a concept of the line of best fit, which is a line drawn through a scatter diagram of a plot of the two variables in a position which, effectively, puts as many as possible of the plotted points as close as possible to the line. The scatter diagram of the relationship between sales prices and GRVs is shown in Figure 6.2.

[36] The size of the product-momemt correlation coefficient (*r*) varies from +1.0 for a perfect positive correlation, to –1.0 for a perfect negative correlation. A coefficient of zero indicates no linear relationship between the two variables.
[37] Significant at the .01 level.
[38] Downie, N & Heath R (1965), ***Basic statistical methods*** Harper & Row, New York, p95

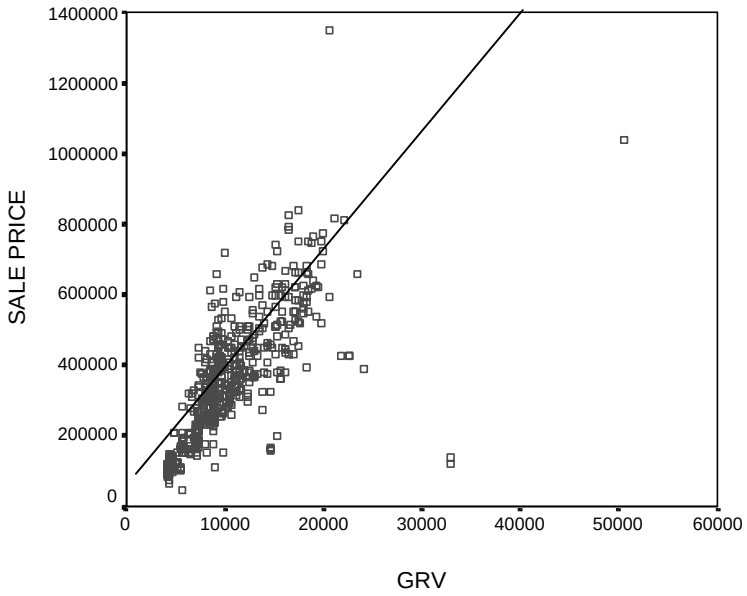


Figure 6.2: Scatter diagram: dwelling sale price and GRVs, Subiaco 2001-02

A brief and simplified explanation of the statistical technique of linear regression was included in Section 5.4. The following analysis uses the approach and the terminology adopted in Section 5.4.

The linear regression analysis for dwelling sales prices and GRVs produced the following result:

$Y' = 47{,}856 + 29.556\ X.$

Expressed in non-statistical terms, this means that the estimated sales price of a property (*Y'*) is $47,856 plus $29.56 for every dollar of GRV (values of GRV are designated as *X* in the above equation). For example, if the GRV of a property is $10,000, the estimate of the sale price of that property would be $343,416 ($47,856 + $29.556 multiplied by $10,000).

To further illustrate the utility of these synthetic estimates of sales prices, a random selection of properties has been generated from the database with the actual sales price and the estimated sale price (using GRV formula above) shown (Table 6.7).

Table 6.7 Relationship between actual sales and estimated sale price for random sample of Subiaco properties sold 2001-2002

Actual sales price	**Estimate of sale price**	**% error**
128,500	176957	37.7
215,000	263,024	22.3
314,000	287,614	8.4
347,200	342,943	1.2
435,000	416,715	4.2
480,000	501,245	4.4
510,000	493,560	3.2
640,000	608,829	4.9
660,000	739,466	12.0

While the overall relationship between sales price and GRV is very strong, the "error" in the above sample of synthetic estimates ranges from 1.2 per cent to 37.7 per cent.

As for the estimates of market rents in Chapter 5, it should be noted that for some outliers[39] in this analysis, the relationship between sales price

[39] An outlier is a point on the scatter diagram far from the line of best fit.

and the synthetic estimate based on GRV will not be a close one[40].

Moreover, in light of the two largest errors occurring in lower value sales in Table 6.6, further analysis of this relationship was undertaken to determine how strong the link is between sales price and GRV at the bottom end of the market. To explore the stability of the overall relationship between all sales and GRVs, two further analyses were undertaken:

(i) for those properties selling below the median sales prices of $340,000 in 2001-2002, the correlation between sales price and GRV drops to 0.505. This is still a strong and statistically significant relationship, but one in which the error between actual and estimated sales prices is likely to be higher.

(ii) for those properties selling below $207,000 (this represents the bottom 25 per cent of sales in Subiaco in 2001-2002) the correlation between sales price and GRV was only 0.291.

These further analyses suggest that GRVs are *not* a good predictor of sales prices for those properties that are likely to be affordable to modest or low income households in Subiaco.

These further analyses suggest that GRVs are *not* a good predictor of sales prices for those properties that are likely to be affordable to modest or low income households in Subiaco[41].

Implications for future monitoring of sales prices

This analysis suggest that GRV values are not a reasonable predictor of sale prices in the way that they are for market rents. As such, GRV data does not offer the City of Subiaco a cost-effective means of broadening the analysis of affordable housing by means of data the City already possesses through its rates records.

In terms of ongoing monitoring of affordable housing for purchase, it is recommended that the City rely on the sales evidence of the Valuer General rather than generate synthetic estimates of sales prices through GRV data. The positive aspect of this approach is the relatively easily

[40] For this analysis, one specific outlier with a GRV in excess of $50,000 was excluded from the analysis as it related clearly to the sale of multiple dwellings on one title.

[41] It may be possible that there is a curvi-linear relationship between these variables that could be expressed statistically. However, this would introduce a degree of complexity into the analysis that could limit its utility.

available access to sales evidence through the VGO. This is quite different from the situation of the private rental market where it a profile of market rents could only be obtained through a resource-intensive data collection process.

(4) Mapping affordable housing

A key outcome of this project is the mapping of affordable housing. The sales evidence data obtained from the OVG and used in this analysis provides an opportunity to map 'affordable' housing sold during 2001-2002 .

For this mapping, site information provided by the OVG has been used to locate the precise lot of specific sales.. The appended map of sales contain the locations of housing in the bottom three deciles of the sales records for the City of Subiaco in 2001-2002. This covers a price range up to $250,000. The sales of housing in these three price bands are also categorised according to the number of bedrooms they contain.

The choice of sales prices ranging up to $250,000 takes the properties mapped beyond the affordability threshold of $204,444. However, it enables identification of property that is affordable, or is near-affordable. The concept of near-affordability is important if there is any market intervention of housing programs, such as joint ventures, that could 'kick-start' households into home ownership.

Part 2

Threats to affordable housing

Chapter 7

Factors impacting affordable housing

7.1 Introduction

Part 1 of this report has provided a picture of the current situation in Subiaco regarding affordable housing, both in the private rental market and for purchase.

However, the dynamics of cities are powerful, and the dynamics of housing markets are subject to many forces that can impact directly on the supply, or the lack of supply, of affordable housing. Part 2 of this report sets out some of the key factors likely to impact on affordable housing in Subiaco over the next five to ten years.

It is very difficult to make accurate predictions about the affordability of housing in specific locations. Moreover, from the perspective of local government, very little can be done to influence some of the key macro-environmental factors that are likely to impact on the affordability of housing. Some of the factors outlined in this chapter are likely to diminish the affordability of housing irrespective of how actively the City of Subiaco pursues creative and

positive affordable housing policies. The City of Subiaco cannot stem the tide of urban change, or influence macro economic factors and the myriad of other forces that impact on the affordability of housing. However the City can do much to ameliorate the broader forces at work through its own policies and through strategic partnerships with other key stakeholders.

However, it *is* possible to influence the supply of affordable housing at a local level. To do so, it is important to understand the range of factors that influence housing affordability, and to be clear about what the role of the City of Subiaco should be, or *could* be, in relation to these.

In order to present a strategic overview of some of the threats to affordable housing, a 'force field analysis'[42] is presented that portrays the various forces working towards an increase in the supply of affordable housing, and the opposing forces that threaten affordability (Figure 7.1).

Some of the key factors affecting the affordability of housing are macro economic factors such as interest rates and the rate of inflation. Predictions of these are beyond the scope of this project, as are the related issues of future trends in wages and salaries relative to inflationary trends and the cost of money.

7.2 Macro-global influences on affordable housing

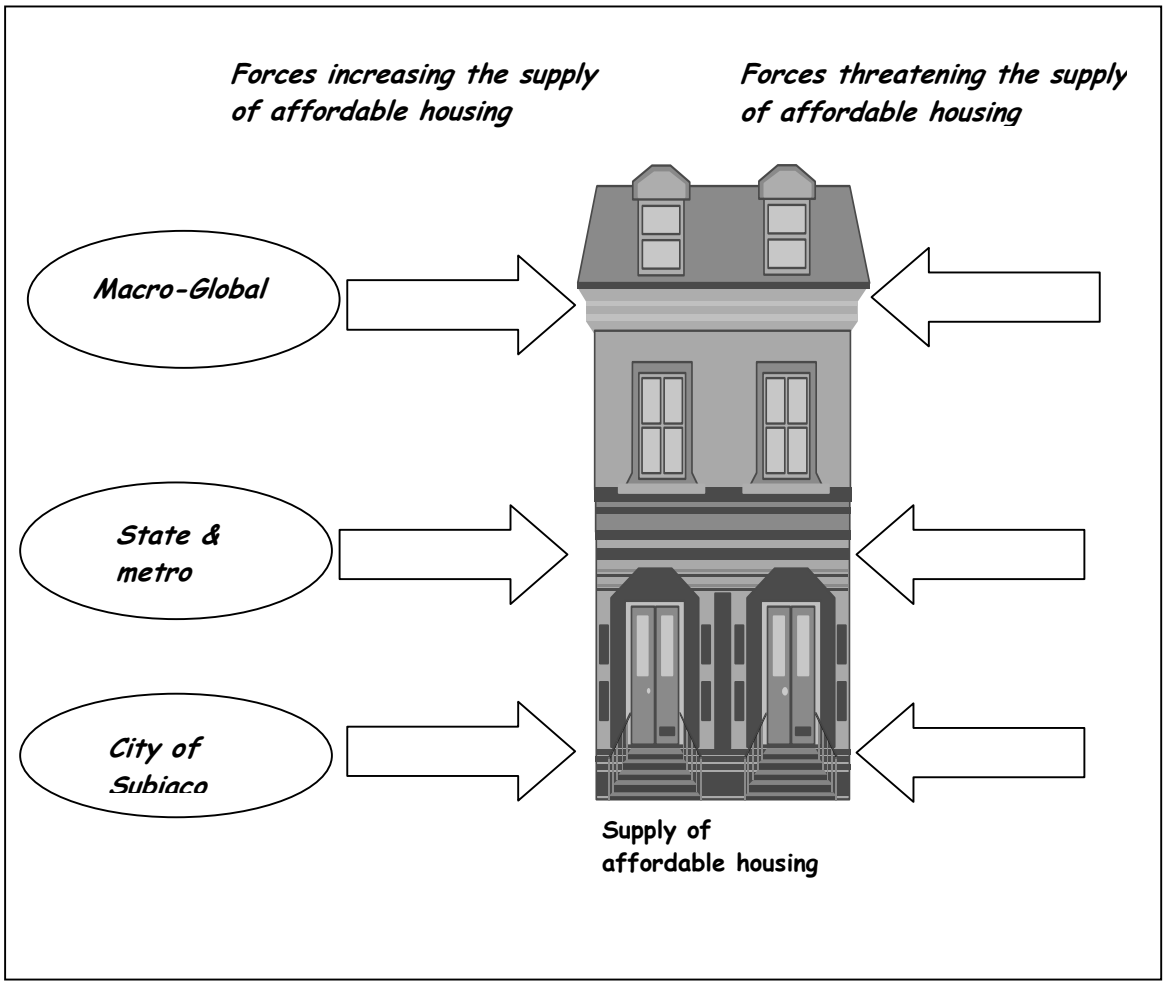
Macro and global influences on the supply of affordable housing are those operating at a national and international level that are likely to have an impact on the affordability of housing anywhere in Australia. They include:

(1) Macro economic factors

- prevailing rates of inflation
- prevailing interest rates for home loans
- the relative returns on investment for housing compared with other key areas of investment such as shares.

[42] Descriptions of force field analysis are found in many books on strategic planning or at websites such as http://www.mindtools.com/forcefld.html

Figure 7.1 **Schematic view of forces impacting on the supply of affordable housing**



Clearly, higher rates of inflation and higher prevailing interest rates impact negatively on housing costs. The last five years have seen lower interest rates than those prevailing in the previous decade or so. This has made loan repayments more affordable, but has also increased competition for lower cost housing, especially amongst first home buyers. This competition can lead to higher house prices which impact on home ownership affordability as well as affordability in the private rental market.

(2) National policy

In addition to the policy influence on macro-economic factors discussed above, there are a number of national policy areas that can have a direct impact on the supply of affordable housing. These include:

- assistance to home ownership, such as first home owner grants, which enable people who may not have been able to afford to purchase a property to enter the competition for owner-occupied housing
- taxation policies, such as those related to negative gearing on investments, including investment housing
- social and public housing policies of the Commonwealth Government which determine the amount of public and social housing is able to be provided at a State level. Again, the implication is clear: if the supply of public housing is limited, there are more lower income families competing for affordable housing in the private rental market, thereby driving up rents
- National affordable housing policy issues are also on the agenda of Commonwealth and State/Territory Ministers with housing responsibilities, via the Council of Australian Governments (COAG) forum.

(3) National initiatives

While the national-level issues affecting affordable housing mainly revolve around the policy and macro-economic factors identified above, there are also a number of initiatives at Federal level that are worthy of note for their potential to increase the supply of affordable housing. These include:

- the work of the Affordable Housing National Research Consortium
- the work of the Menzies Research Centre in exploring innovative means of reducing the costs of home ownership, including shared equity arrangements.

7.3 State level and metropolitan-wide factors affecting the supply of affordable housing

At the State and metropolitan level there are a number of forces that operate to affect the supply of affordable housing in either a positive or negative way. These are generally not issues unique to Subiaco, but are common in many inner city municipalities where processes of urban renewal and/or gentrification have impacted on affordable housing.

1 Negative impacts on the supply of affordable housing

(1) Rising land and house prices

When the price of land and housing increases at a faster rate than increases in household incomes, affordability becomes increasingly problematic.

… the cost of housing in Subiaco … has far outstripped the cost of housing throughout the metropolitan area. …while the median price of housing in Perth increased 10 fold over 30 years …the median price of housing in the suburb of Subiaco rose 27 fold

Information on thirty year price trends available from the website of the Real Estate Institute of Western Australia reveals clearly how the cost of housing in Subiaco suburbs has far outstripped the cost of housing throughout the metropolitan area. For example, while the median price of housing in Perth increased 10 fold over the 30 year period, the median price of housing in the suburb of Subiaco rose 27 fold (see Figure 7.2).

Although beyond the scope of this project to analyse in detail, the markedly higher increase in property prices in Subiaco compared with the broader Perth metropolitan area is also reflected in other inner city localities which have a number of characteristics in common with Subiaco. For example, in nearby Leederville, median prices increased almost 19 fold, and in Victoria Park there was a sixteen fold increase in median prices over 30 years.

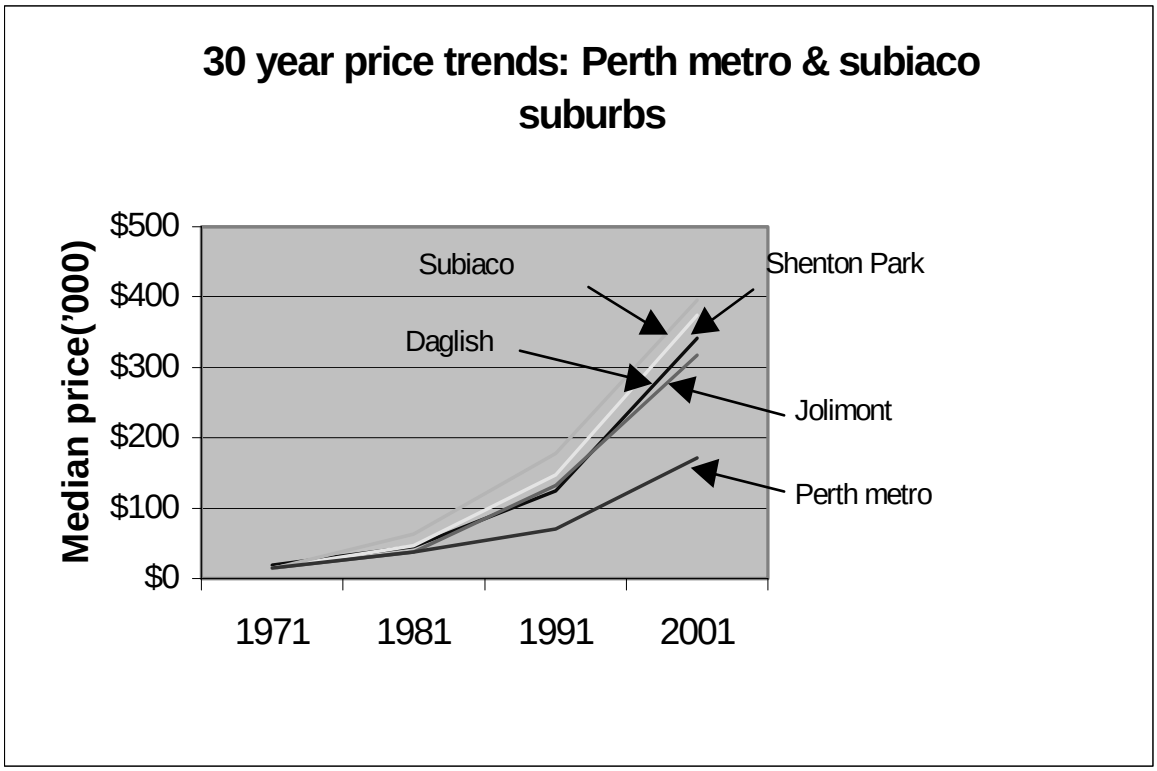
In the 1970's the Perth metropolitan area grew rapidly and many homeowners today benefited from the large growth in property values during this period. At the same time as the sudden expansion in the suburban area the first signs of inner city housing becoming fashionable emerged in Subiaco.

> In 1971 the median house price in Subiaco was $14,000, which was slightly less than the overall median house price for Perth. However by 1981 the Subiaco median house price was 50% greater than the metropolitan area median, and by 2001 Subiaco property values were 130% greater than the overall market.
> (G Joyce, 2002)[43]

This REIWA commentary on 30 year price trends in housing in Perth highlights the stellar rise of housing prices in favoured inner city localities, and is central to understanding the trends in affordable housing in Subiaco and its future threats.

[43] 30 year ***Perth real estate highlights – REIWA study*** (http://www2.reiwa.com/content-suburb-30year-trends-article.cfm)

Figure 7.2: 30 year price trends in median property values: Perth and Subiaco suburbs



Source: REIWA website (www.reiwa.com.au)

(2) Gentrification

The phenomenon of 'gentrification' is another key force causing pressure of the supply of affordable housing. Gentrification, and the far greater rate of property increases in Subiaco, discussed above, are two sides of the same issue.

Gentrification is generally associated with a number of distinctive characteristics including:

the trend of higher income groups to see certain inner city locations as being increasing desirable places to live … is often magnified in areas where the housing stock has significant heritage value…

- a renewal and increase of housing capital flowing into inner city residential areas. In many cities, this may signal a reversal of a period of urban decay and declining or stagnant property prices.

- the trend of higher income groups to see certain inner city locations as being increasing desirable places to live. This is often magnified in areas where the housing stock has significant heritage value or intrinsic character.

- the displacement of groups unable to compete for increasingly expensive housing.

The phenomenon of gentrification is certainly evident throughout the City of Subiaco. A high proportion of its housing has intrinsic architectural and streetscape appeal that has fueled the demand for housing and fueled rapid inflation in property values.

These processes are commonly self-reinforcing. That is, the more fashionable a suburb becomes, the more other high income households seek to move there and property values are pushed even higher.

There are two dimensions to gentrification that are both present in the City of Subiaco. The first relates to the rehabilitation and enhancement of the housing stock and associated changes to the streetscape of an area. This is evident in many parts of the City of Subiaco.

The second dimension of gentrification is the displacement or replacement of existing

residents with newcomers to the area. Concern over changes in the traditional social mix of Subiaco was one of the underlying considerations behind the City's initiation of this project on affordable housing. Details of the City's changing social mix were included in Chapter 2 of this report. While changes in social mix can be noted, it is impossible to determine without specific research, well beyond the scope of this project, whether these changes in social mix are a *displacement* of Subiaco residents, or a *replacement* of them.

Displacement implies that lower income groups are forced out or are unable to compete in the housing market. On the other hand, *replacement* could imply that some original homeowners have taken advantage of rapidly rising property prices and have realised their (untaxed) capital gains and moved to areas of lower housing costs.

2 Factors positively affecting the supply of affordable housing

Counteracting the powerful forces of housing and residential fashion, and the general inflationary trends in the costs of land and housing, are a number of factors which operate at the State or metropolitan-wide scale to ameliorate the loss of affordable housing. Many of these are policy-driven initiatives of government. In Western Australia, the State Government has embarked on a series of initiatives to boost the supply of affordable housing. In addition, there are initiatives that can be fostered or championed by the Western Australian Local Government Association[44]. These are not necessarily all applicable to the City of Subiaco, but include:

- development of a ***Statement of Planning Policy*** (SPP) on Public Housing, Community Housing and Affordable Private Housing
- establishment of an inter-agency Affordable Housing Working Group involving the Departments of Planning and Infrastructure, Housing and Works and other other Government instrumentalities

[44] Information provided by WA Department of Housing and Works, Office of Policy and Planning

such as Landcorp and the Subiaco Redevelopment Authority

- diversion of surplus or under-utilised government-owned land to affordable housing projects or community housing
- development of a policy framework and strategic approach to the enhancement of the community housing sector
- identification of planning solutions, such as density bonuses for developments that incorporate sustainable affordable housing.

7.4 Local factors and issues specific to the City of Subiaco affecting the supply of affordable housing

The final set of factors that can operate to either increase, or threaten, the supply of affordable housing, are those issues within the control of the City of Subiaco itself.

In many respects, the City of Subiaco cannot control, or even influence, the macro-economic factors affecting affordable housing (such as taxation policy), and the metropolitan-wide forces such as increases in land and property values in inner city locations. However, there is much that the City of Subiaco can do within its own direct sphere of control and influence that can ameliorate the tide of forces that threaten affordable housing.

There is no point having a strategic objective of preserving affordable housing and maintaining the … traditional social mix if other strategic objectives … have the opposite effect.

The first, and most basic, is to acknowledge and recognise explicitly its own role, and its own capacity, to make a difference in the supply of affordable housing. A key element of this is to ensure that there is alignment of its key strategic goals. There is no point having a strategic objective of preserving affordable housing and maintaining the City's traditional social mix if other strategic objectives also endorsed by the City, work against this.

A simple example of this would be in respect to the City's own stock of property which it holds. If the City has a policy to maximise the economic return on dwellings that it owns, this is clearly incompatible with a strategic intent to address issues of housing affordability. As such, Council

has a policy choice of either maximising returns on investment, or investing in the social capital of the City through its policies on affordable housing.

Accordingly, it would be appropriate for the City to undertake an audit of its own strategic objectives to determine the extent to which they are properly aligned to the overarching objectives in relation to affordable housing.

It is also important for the City to appreciate that *lack of action* can be a powerful force that threatens the supply of affordable housing in Subiaco. In other words, if the City does ***not*** take any of the positive actions identified in section 2 below, it will itself be contributing to threats to affordable housing.

1 Negative impacts on the supply of affordable housing

There are a number of actions that are directly within the control of the City of Subiaco that threaten the supply of affordable housing. However, some of the City's successes in a broader planning context have, paradoxically, had a negative impact on affordable housing.

Foremost amongst these is a paradox of Subiaco's social and environmental capital. The City of Subiaco has a high level of social capital, reflecting the nature of its residents, and their connection to the local community. *There's something different about Subi* is an expression that sums up the intrinsic appeal of Subiaco for many people. Its community services, the overall amenity value of the municipality, and the City's approach to the enhancement of these attributes, are commonly highly valued by residents.

Paradoxically, these enhance the appeal of Subiaco to high income households who live outside the municipality and increase the competition for housing amongst those who value Subiaco's unique social, cultural and environmental milieux.

Of course, it would be nonsense to suggest that one way the City of Subiaco could lessen the threats to the City's affordable housing would be to make the municipality a less attractive place in

… the very success of the City in creating an attractive and highly sought-after residential environment, means that it has to be even more proactive in pursuing other measures within its control that can enhance the supply of affordable housing.

which to live, work or play. What this paradox does suggest however, is that the very success of the City in creating an attractive and highly sought-after residential environment, means that it has to be even more proactive in pursuing other measures within its control that can enhance the supply of affordable housing.

Other factors that the City of Subiaco has some direct influence or control over that impact negatively on the supply of affordable housing include:

- **lowering of residential densities** through rezoning, or planning approvals for the redevelopment of sites at a lower density than previously existed there
- **rezoning** of property, especially in areas where there are pressures for the extension of professional and commercial offices into houses along major roads. Significant numbers of commercial enterprises in Subiaco such as architects, IT companies and marketing firms are located in dwellings that, in all probability, previously housed the very social groups that have been lost to the City over the past decade or so
- **aggressive enforcement of regulations** that impact on the provision of boarding and lodging houses. This is not to say that the City has pursued such policies, nor that it should disregard health and safety issues which are of paramount importance in the provision of group housing. However, it behoves the City to examine its own approach to these issues and, should it be found wanting in any area, to adopt a more proactive and supportive role to the retention of group housing in the municipality.
- refusal to allow **multiple dwellings and ancillary accommodation**, such as 'granny-flats' or lofts above garages in areas where this could enhance the supply of affordable housing.

2 Factors positively affecting the supply of affordable housing

The City of Subiaco has taken a lead role in Western Australia in terms of Local Government involvement in issues of social and affordable housing. Given the current policies and directions of the State Government in the areas of affordable housing, the City is well-placed to develop further initiatives and enhance its role in this area in keeping with its strategic objectives outlined in its ***Statement Of Principal Activities.***

It is recommended … the City adopt a two-pronged approach to … the supply of affordable housing … The first relates to issues within the control of the City, while the second revolves around opportunities for partnerships and strategic alliances.

It is recommended here the City adopt a two-pronged approach to developing actions which will positively affect the supply of affordable housing in Subiaco. The first relates to issues within the control of the City, while the second revolves around opportunities for partnerships and strategic alliances with State Government and other stakeholders to progress common objectives in the area of affordable housing.

Issues within the direct control of the City of Subiaco

There are a number of actions that are within the direct control of the City of Subiaco that could do much to enhance the supply of affordable housing in the municipality, and/or to prevent the loss of existing affordable housing. These include:

(1) Planning measures, such as density bonuses

The issue of density bonuses for developments that address affordable housing objectives is a widely cited response available to local authorities. The assumptions of such bonuses are clear: if a development is allowed to put more housing units on a given piece of land, the average cost of those units should be lower.

Existing Residential Codes already allow density bonuses for special purpose dwellings, including those for older people. However, it is possible to extend the eligibility of these bonuses into a broader spectrum of affordable housing, including commercial developments.

However, there are a number of problems in the implementation and sustainability of such policies. These include the inability to prevent the larger number of units being on-sold at prices that are unaffordable to the social groups targeted by the policy initiative. Even if the initial sale of an 'affordable' property within a development is secured, there needs to be an ongoing mechanism to ensure that any subsequent sale does not lose its affordability 'tag'.

One simple solution … is to ensure that affordable housing units incorporated into redevelopment projects are not sold as owner-occupied housing for individuals or households.

The Subiaco Redevelopment Authority is currently addressing this policy issue. One simple solution to this common dilemma over the retention of affordable housing, is to ensure that affordable housing units incorporated into redevelopment projects are not sold as owner-occupied housing for individuals or households. This means that such housing needs to be retained through social housing or community housing mechanisms that have much stronger safeguards against the loss of affordable stock.

(2) Redevelopment of non-complying sites

The City of Subiaco is currently considering the addition of a new clause to its Town Planning Scheme that would allow sites that do not comply with existing R codes to be redeveloped at the existing (non-complying) dwelling density.

This initiative would be a further positive step by the City to boost affordable housing, although redevelopment per se does not guarantee the supply of affordable housing. Such redevelopment may need to be undertaken in conjunction with other initiatives to 'quarantine' affordable housing from its subsequent loss on the open market.

(3) Infill housing and 'ancillary accommodation'

There are many opportunities within the City of Subiaco for infill housing and ancillary accommodation which do not compromise the character of the suburbs, the streetscape or the social environment. Foremost amongst these is

the construction of small self-contained units such as 'granny flats' or lofts.

There is a ready demand for such housing in the City of Subiaco. The City's own population is ageing, and many of its mature *baby boomer* residents have parents whose care needs may be increasing, and who would welcome the opportunity to make an appropriate housing adjustment to a small unit on the property of a son or daughter. Alternatively, some older Subiaco residents who live alone in a home too large for their current needs (or capacity to maintain) would welcome the opportunity to live in a purpose built 'granny flat'. Such moves could bring additional families into Subiaco who could not otherwise afford to live there.

Although lot sizes in Subiaco are not large in comparison to other parts of the metropolitan area, there are likely to be a significant number of properties where ancillary accommodation could be developed without any loss of residential amenity to the primary residents of the property, or to neighbours.

Similarly, 'loft-style' developments, which are commonly incorporated as a second storey above a garage or other outbuilding, have considerable potential to enhance the supply of affordable housing. The presence of the University of Western Australia, and major employers such as hospitals within the municipality, means that there is likely to be a strong and ongoing demand for small housing units for couples or single person households.

Opposition to these type of 'loft-style' ancillary accommodation developments is commonly based on the potential of such units to overlook the rear gardens of adjoining properties, thereby impacting on the privacy of neighbours. To some extent, these objections can be overcome through design principles and guidelines, such as the use of higher level windows in loft structures.

Moreover, there is a countervailing argument that some degree of neighbourhood surveillance is an appropriate strategy for enhancing community safety, especially in those parts of the City which have rear laneways. Such laneways provide

ready access to loft-style dwellings, and this can enhance 'natural' surveillance. Without any surveillance, these very laneways are a potential security risk to existing residents.

(4) Affordable housing and high rise developments

Another option for the City to consider is to allow a radical change of housing density on appropriate but restricted sites for the development of high-rise housing with a strong affordability component.

The issue of high-rise housing is controversial. Images and stereo-types of poorly-designed public housing in many cities of the world should not be dragged out to dismiss this suggestion without proper and due consideration.

It is undoubtedly true that many of the high-rise social housing developments of the postwar era have been poorly designed, poorly managed, and have become synonymous with social problems.

However, there is nothing intrinsic to high-rise housing that means it must be viewed in this manner, or have negative social outcomes. The western suburbs have very many high-rise developments with sweeping river views that command totally 'unaffordable' prices. This includes parts of Crawley and Claremont. Moreover, there have also been many advances in design and building technology that mean the mistakes of the 1960s need not be repeated in the 21st century.

It is not appropriate for this study to recommend specific sites, but clearly the general localities around the University of Western Australia and Sir Charles Gairdner Hospital would seem to be obvious areas where such developments could be considered.

It is also beyond the scope of this project to explore funding options or other issues such as joint ventures, or shared equity schemes. However, there are a number of obvious options that could be explored including mixed commercial and residential developments, mixed

housing tenures and joint social housing/commercial development partnerships.

(5) Affordable housing policy

Underpinning all of the initiatives outlined above is the need for the City to continue to develop a clear policy statement on affordable housing that incorporates policy directions on the issues identified above. The City's existing *Social Housing Policy* incorporates sufficient flexibility to enable the City to embrace a broad range of affordable housing projects for a variety of social groups.

However, it may be appropriate to review the existing Social Housing Policy to determine if all relevant issues related to a broader approach to affordable housing are addressed, and whether or not there is scope for providing greater direction in relation to the supply of affordable housing in the City.

Opportunities for partnerships and strategic alliances

In addition to the actions that the City of Subiaco can undertake by itself, there are a number of options for increasing the supply of affordable housing that the City may wish to pursue through partnerships and strategic alliances with other key stakeholders. The City is well placed to do this, and the benchmark data and analysis of affordable housing included in this report provides the City with a credible base to further its interest in affordable housing with other stakeholders.

(1) Supporting the community housing sector

Community housing is a small but innovative sector of Australian housing. Western Australia has an active community housing sector, which is represented on the City's Social Housing Advisory Committee.

Community housing offers considerable potential to enhance the supply of affordable housing in Subiaco. Furthermore, the City of Subiaco is well

placed to work with the community housing sector to progress common objectives.

(2) Surplus Council land

The Council's existing Social Housing Policy provides for the use of Council-owned property to be utilised for social housing purposes, including joint ventures with developers where ownership of the land is retained by the City and offered to the developer on a long-term lease.

This is a positive policy initiative that could easily embrace a broad approach to affordable housing rather than a narrow approach to limited forms of social housing targeted at seniors or people with a disability.

(3) Partnerships

The City of Subiaco's ability to influence the supply of affordable housing can be leveraged considerably through the development of new strategic partnerships and strengthening of existing ones.

The City of Subiaco's initiatives in social and affordable housing place it in the vanguard of Local Government in Western Australia in this area. As such, the City is well-placed to work with major stakeholders at the State Government level to use the City of Subiaco as a pilot for joint ventures and new initiatives. The most critical agencies for the City to continue to work closely with are the Department of Housing and Works, and the Department of Planning and Infrastructure.

Affordable housing initiatives that are foremost amongst potential partnerships with these major State Government stakeholders are the use of surplus government property for affordable housing, and the vesting of some public housing to broader affordable housing initiatives in conjunction with the community housing sector.

These issues are outlined below.

(4) Surplus Government property

The ownership of residential property by Government agencies for potential future developments, including major road works, is a potential source of affordable housing.

Joint ventures to allow the management of such property by the community housing sector should be fostered by the City. The State Government's policy thrust with regard to affordable housing should be a persuasive argument for the use of such stock for affordable housing projects, even if the agency currently holding the property does not have a housing component to its core business.

(5) Deeding of social housing to the City of Subiaco or its affordable housing partners

One further initiative that the City of Subiaco could pursue is to seek to have the Department of Housing and Works deed some of its social housing stock for inclusion in a Subiaco community housing venture.

The key reason for pursuing such a strategy could be to give a 'kick-start' in developing a pool of affordable stock to a community housing organisation sponsored by the City of Subiaco. For example, if a housing cooperative were able to acquire a small number of dwellings from the Department of Housing and Works at the historic cost of those properties to the State, they could be used as equity to borrow money for further purchases in the private market. The 'pooled cost' of these dwelling units could then be used for affordable housing

The countervailing argument, that this would lead to a loss of *public* housing in the City, would have to be balanced against two considerations:

- that the City of Subiaco currently (2001) has roughly the same proportion of dwellings in public housing as Western Australia as a whole (4.2 per cent). Accordingly, the transfer of a small number of public rental stock dwellings to the community housing sector is not going to

substantially deplete Subiaco as a potential area for public tenants.

- the advantages of developing a broader base for affordable housing in Subiaco, and the potential to use this as a model for the development of affordable housing projects in other parts of the State.

7.5 Summary

Many of the factors that impact on the supply of affordable housing are macro-economic, such as interest rates and taxation policy, and are beyond the control of the City of Subiaco. Other factors operate State-wide, or at least throughout the metropolitan area, such as the historic rise in land values. The impact of rising land values on the affordability of housing in Subiaco has been particularly severe because, for the past 20 or 30 years, increases in Subiaco property values have far outstripped those of the broader Perth metropolitan area.

This means that, if it is to influence the supply of affordable housing, the City of Subiaco must focus on strategies that are within the control of the City itself.

Strategies the City of Subiaco can pursue to impact on the supply of affordable housing in the municipality include:

- factors within the direct control of the City such as planning measures related to density bonuses and policies on the development of ancillary dwellings

- opportunities for partnerships, especially with key State Government agencies such as the Departments of Housing and Works, and Planning and Infrastructure. The main opportunities for such partnerships are in the areas related to the use of surplus government property, and more radically, the deeding of public housing to the City of Subiaco and/or its community housing partners.

The City of Subiaco is well-placed to influence the supply of affordable housing within the municipality. There is no single 'silver bullet' that will overcome the lack of affordable housing demonstrated clearly by the research in this report. However, much can be achieved through:

- the adoption of a clear strategic and planned approach
- consistent policies in different areas of the City's business that impact on the supply of affordable housing, and
- development of key partnerships with State Government, the community housing sector and private developers.

Bibliography

Affordable Housing National Research Consortium (2001) ***Affordable housing in Australia: Pressing need, effective solution***

Berry, M (2001) ***New approaches to expanding the supply if affordable housing in Australi an increasing role for the private sector*** Ppaer presented to Natinal Housing Conference, 2001 Brisbane

Brotherhood of St Laurence (2001) Submission to the Commonwealth Advisory Committee on Homelessness

Burbridge A (2000***) Housing and families: towards an alternative view*** Presentation to Semi at Australian Institute of Family Studies October 2000

City of Adelaide (2000) ***Affordable housing strategy: Discussion paper***

City of Adelaide (2002***) What sort of goods are neighbours? Social mix and a sustainable residential community in Adelaide***, City Living Summit, Adelaide February 2002

City of Vancouver (2001) False Creek Soouth Shore: Evaluation of social mix objectives

City of Willoughby (1998) ***Willoughby City Housing Poilicy***

Commonwealth of Australia (1991) National Housing Strategy Issues Paper No 1***Australian housing: the demographic, economic and social environment***

Community Housing Coalition of WA (2000) ***City of Subiaco: Affordable housing research study***

Housing Justice Roundtable (2001) ***Housing for all: a policy response to the housing crisis*** (www.housingjustice.org.au/pp/HJRT.ppt)

Karmel, R (1995) Measuring financial housing stress (Australian Institute of Health and Welfare Working Paper No 8)

Landt, J and Bray R (1997) ***Alternative approaches to measuring housing affordability in Australia*** (National Centre for Socal and Econmic Modelling, University of Canberra, Discussion Paper No 16)

Logan, W.S. (1985) ***The gentrification of inner Melbourne: a political geography of inner c housing*** University of Queensland Press, St Lucia

National Community Housing Forum (2000) ***Mapping community housing in Australia***

National Housing Institute (1997) ***Saving affordable housing: what community groups sho do and governments can do*** (www.nhi.org/online/issues/sf90.html)

Playford, T (2001) ***Australian Governments and sustainable housing*** Geoview (www.ssn.flinders.edu.au/geog/geos/Playford.htm)

Property Council of Australia (1999) ***Affordable housing and the development industry: Position paper***

Queensland Department of Housing (2001) ***Affordable housing in sustainable communities: discussion paper***

Shelter WA (2000) ***Housing for a sustainable community: The state of housing in Westerr Australia*** (Prepared for WACOSS Poverty Commission)

Shelter WA (2002) ***The state of affordable housing in WA*** (Shelter Occasional Paper, Augus

UK, Office of Deputy Prime Minister (2002) ***Delivering affordable housing through planning policy*** (www.planning.odpm.gov.uk)

US Department of Housing and Urban Development (2002) ***Affordable housing: who needs affordable housing ?*** (www.hud.gov/offices/cpd/affordable housing/index.cfm)

US Department of Housing and Urban Development (2002) ***Study of the ongoing affordability HOME Program rents*** (www.huduser.org/publications/affhsg/ongoing.html)

Victoria, Department of Human Services (2000) ***Social housing: building a new foundation*** (Consultants Report, Nov)

Western Australia, Department of Housing and Works (2002) ***Affordability*** Issues Paper, Hous Strategy WA

Winegart, M.E (2001***) Out of reach: housing at what cost?*** (http://rental- housing.co /rental/ afford.htr

Appendices

Map 1 'Affordable' rental properties, City of Subiaco, 2002

Affordable rents have been mapped for the City of Subiaco using synthetic estimates of private rentals derived from the Gross Rental Value (GRV) of each property.

Details of the methodology and techniques used to generate these estimates are found in Chapter 5.4.

Properties mapped are those with a GRV of $4,639 or less. Using the methodology outlined in Chapter 5, this equates to a weekly rental value in the private rental market of approximately $150. The mapping of dwellings with a likely rent of up to $150 per week extends the affordability concept beyond the $135 per week threshold recommended in Chapter 3. This extension of 'affordability' to $150 per week recognises the impact of Commonwealth Rent Assistance on the affordability of housing in Subiaco. Discussion of the role of Rent Assistance in stretching the affordability threshold is included in Chapter 5.

INSERT MAP ! HERE

Map 2

‘Affordable’ properties for purchase, City of Subiaco, 2001-2002

Map 2 identifies the location of ‘affordable’ properties for purchase in the City of Subiaco during 2001-2002. Data for this analysis were provided through the Office of the Valuer General for all dwelling sales in the City of Subiaco between 1 July 2001 and 30 June 2002.

‘Affordable’ properties mapped here are those up to $250,000. This includes properties beyond the strict affordability threshold of $204,000 discussed in Chapter 6. As such, it represents affordable housing and ‘near’ affordable housing in the City of Subiaco. It includes the bottom 30 per cent of dwellings sold in 2001-2002.

As discussed in Chapter 6, most of the lowest sales prices are for one bedroom accommodation. Map 2 includes an indication of the number of bedrooms of a property.

INSERT MAP 2 HERE

Appendix 1 Calulating financial housing stress

Calculation of proportion of income spent on housing from grouped data

Calculating the exact proportion of income which any household spends on housing costs depends on specific income and housing cost data for each household. This information is not generally available, even from Census data.

For both rents and mortgage payments, data for household income and for housing costs were provided by ABS in categories. For example, 15 categories of rental payments were provided in the tables ($0-$24 per week; $25-49 per week, etc up to the highest category of $500 per week and over. Similarly, 17 broad categories of income were provided with finer gradations at the lower end of the income scale ($1-$39 per week; $40-$79 per week) than at the high end of the scale ($1,000-$1,199; $1,200-$1,499 etc).

In order to estimate the percentage of household income expended on housing, the mid-points of these categories were taken. For example, the mid-point of the income grouping $400 -$499 per week was taken as $450; and the mid-point of the weekly rental cost category $150 - $174 per week was taken as $162. For households falling in this cell of the table, rental costs were calculated as 36 per cent of household income ($162 is 36 per cent of $450).

In order to calculate the percentage of household income devoted to housing costs, it was necessary to go through the following five-stage process.

Stages:

(1) Calculate mid-points of housing cost categories and mid-points of household income categories

(2) Calculate housing costs as a percentage of household income for each cell of the cross-tabulation of income and housing costs

(3) Link the percentages calculated in Step 2 to the numbers of households in each cell of the original table

(4) Calculate the number of households in each five per cent group (0-4% 5-9% etc up to 95-99% and 100% and over).

(5) Calculate the proportion of households paying 0-4.9%; 5-9.9% etc of household income for housing.

Appendix 2

Affordability gaps: Private rentals, City of Subiaco 2001

The table is based on the midpoint of categories of household income per week and the midpoint of weekly rent payments.
The affordability gaps shown are the dollar value of gaps per week. Only those affordability gaps which were experienced by Subiaco residents in 2001 are included in the table.

Income midpoint	Midpoint values of rental categories														
	$12	**$37**	**$62**	**$87**	**$112**	**$137**	**$162**	**$187**	**$212**	**$237**	**$262**	**$287**	**$350**	**$450**	**$550**
$20					$107										
$60		$22			$97	$122	$147								
$100		$12	$37	$62	$87	$112	$137								
$140		$2	$27	$52	$77	$102	$127				$227				
$180			$17	$42	$67	$92	$117	$142			$217				
$250				$25	$50	$75	$100	$125	$150	$175	$200	$225	$288		
$350					$25	$50	$75	$100	$125	$150	$175	$200	$263	$363	
$450						$25	$50	$75	$100	$125	$150	$175	$238		$438
$550							$25	$50	$75	$100	$125	$150	$213		$413

Source: Calculated from ABS special cross-tabulations of household income and housing costs, Census 2001

Appendix 3

Affordability gaps: Home purchasers, City of Subiaco 2001

The table is based on the midpoint of categories of household income per week and the midpoint of weekly home loan repayments.
The affordability gaps shown are the dollar value of gaps per week. Only those affordability gaps which were experienced by Subiaco residents in 2001 are included in the table.

Income midpoint	Midpoint values of home loan categories													
	$100	$300	$450	$550	$650	$750	$850	$950	$1,050	$1,150	$1,250	$1,350	$1,450	$1,550
$20														
$60														
$100														
$140														
$180		$54			$54								$54	
$250			$75		$75									$75
$350						$105	$105		$105	$105				
$450					$135			$135				$135		
$550						$165		$165		$165	$165	$165		$165
$650							$195		$195					$195
$750									$225		$225			$225
$850										$255	$255	$255	$255	$255
$1,100													$330	$330
$1,350														

Source: Calculated from ABS special cross-tabulations of household income and housing costs, Census 2001

Appendix 4 Private rental profile of Subiaco suburbs, 2002

The following table details the private rentals for different suburbs of Subiaco gathered during the period August 2002- January 2003. The table is based on deciles, which break the rentals up into 10 groups of equal size. Decile 1 represents the bottom 10 per cent of rentals in terms of price. Deciles 1 to 5 represent the bottom 50 per cent of the private rental market.

The top figure in each cell of Appendix 4 represents the percentage of the total rentals in that price bracket that are in a particular suburb. For example, 25 per cent of all rentals in the first decile (rents up to $120 per week) were in the suburb of Daglish.

The second figure in each cell represents the proportion of all rentals from that suburb that are found in that decile. For example, 37.5 per cent of all rentals in Daglish were in the first decile (rents up to $120 per week)

Appendix 4 : Private rental profile of Subiaco suburbs, 2002

Rent		SUBURB						Total
		Craw	Dagl	Joli	Ned	Shnt Pk	Subi	
Up to $120	% in Rental decile	22.2%	25.0%	5.6%	5.6%	19.4%	22.2%	100%
	% within SUBURB	28.6%	37.5%	22.2%	7.1%	12.1%	5.6%	12.4%
$121 to $135	% in Rental decile	10.3%	3.4%	3.4%	17.2%	24.1%	41.4%	100%
	% within SUBURB	10.7%	4.2%	11.1%	17.9%	12.1%	8.3%	10.0%
$136 to $153	% in Rental decile	13.6%	13.6%		27.3%	22.7%	22.7%	100%
	% within SUBURB	10.7%	12.5%		21.4%	8.6%	3.5%	7.6%
$154 to $180	% in Rental decile	10.0%	3.3%	6.7%	10.0%	23.3%	46.7%	100%
	% within SUBURB	10.7%	4.2%	22.2%	10.7%	12.1%	9.7%	10.3%
$181 to $220	% in Rental decile	14.7%	5.9%	8.8%	8.8%	17.6%	44.1%	100%
	% within SUBURB	17.9%	8.3%	33.3%	10.7%	10.3%	10.4%	11.7%
$221 to $250	% in Rental decile	10.8%	5.4%	2.7%	10.8%	21.6%	48.6%	100%
	% within SUBURB	14.3%	8.3%	11.1%	14.3%	13.8%	12.5%	12.7%
$251 to $275	% in Rental decile		18.2%		13.6%	4.5%	63.6%	100%
	% within SUBURB		16.7%		10.7%	1.7%	9.7%	7.6%
$276 to $316	% in Rental decile					30.4%	69.6%	100%
	% within SUBURB					12.1%	11.1%	7.9%
$317 to $379	% in Rental decile	3.4%	6.9%		6.9%	20.7%	62.1%	100%
	% within SUBURB	3.6%	8.3%		7.1%	10.3%	12.5%	10.0%
$380 & over	% in Rental decile	3.4%				13.8%	82.8%	100%
	% within SUBURB	3.6%				6.9%	16.7%	10.0%
Total	**% all rentals in suburb**	**9.6%**	**8.2%**	**3.1%**	**9.6%**	**19.9%**	**49.5%**	**100%**

Source: **Compiled by Lee Phillips and Associates**

Appendix 5 Sales evidence data base

Sales evidence for the City of Subiaco for the year 2001-2002 was obtained from the Office of the Valuer General (OVG).

In addition to price, and complete locational details of each property sold, the database also contains full information on number of bedrooms, bathrooms, and other features including the presence of garages, swimming pools and other property information.

These data are an excellent source of information on sales, and could be utilised by the City for ongoing monitoring of affordability in Subiaco.

The database is provided to clients by the OVG in Excel spreadsheet format so that it easy to manipulate or to transfer to other software for further analysis. For this project, the analysis was undertaken using SPSS software (Statistical Package for the Social Sciences).

Appendix 6 Housing sales, City of Subiaco 2001-2002: Sale price by suburb

Grouped sales price (deciles) by Suburb

		SUBURB							
		CRAW	DAGL	JOLI	NED	SHNT PK	SUBI	WEMB	Total
$125,000 and under	% of price decile in suburb	24.6%	7.2%	17.4%	1.4%	10.1%	39.1%		100%
	% of suburb's sales in price decile	27.9%	11.4%[a]	37.5%	3.3%	4.3%	8.2%		10.4%
$126,000 to $180,000	% of price decile in suburb	17.2%	4.7%	21.9%	1.6%	32.8%	21.9%		100%
	% of suburb's sales in price decile	18.0%	6.8%	43.8%	3.3%	13.0%	4.2%		9.7%
$181,000 to $$250,000	% of price decile in suburb	22.2%	4.2%		2.8%	9.7%	61.1%		100%
	% of suburb's sales in price decile	26.2%	6.8%		6.7%	4.3%	13.3%		10.9%
$251,000 to $299,000	% of price decile in suburb	4.8%	8.1%	3.2%	6.5%	21.0%	56.5%		100%
	% of suburb's sales in price decile	4.9%	11.4%	6.3%	13.3%	8.0%	10.6%		9.4%
$300,000 to $340,000	% of price decile in suburb	4.5%	9.0%	4.5%	10.4%	29.9%	41.8%		100%
	% of suburb's sales in price decile	4.9%	13.6%	9.4%	23.3%	12.3%	8.5%		10.1%
$341,000 to $378,000	% of price decile in suburb	1.5%	16.9%		1.5%	29.2%	50.8%		100%
	% of suburb's sales in price decile	1.6%	25.0%		3.3%	11.7%	10.0%		9.8%
$379,000 to $420,000	% of price decile in suburb	3.0%	9.0%		7.5%	28.4%	52.2%		100%
	% of suburb's sales in price decile	3.3%	13.6%		16.7%	11.7%	10.6%		10.1%
$421,000 to $475,000	% of price decile in suburb	3.1%	4.6%		6.2%	30.8%	55.4%		100%
	% of suburb's sales in price decile	3.3%	6.8%		13.3%	12.3%	10.9%		9.8%
$476,000 to $580,000	% of price decile in suburb	6.3%	1.6%	1.6%	6.3%	32.8%	50.0%	1.6%	100%
	% of suburb's sales in price decile	6.6%	2.3%	3.1%	13.3%	13.0%	9.7%	100%	9.7%
$580,000 to $1.35 mill	% of price decile in suburb	3.0%	1.5%		1.5%	22.7%	71.2%		100%
	% of suburb's sales in price decile	3.3%	2.3%		3.3%	9.3%	14.2%		10.0%
Total	% of price decile in suburb	9.2%	6.7%	4.8%	4.5%	24.5%	50.1%	.2%	100%

Source: Valuer General: Sales records 2001-2002

Legend: CRAW=Crawley; DAGL=Daglish; JOLI=Jolimont; NED=Nedlands; SHNT PK=Shenton Park; Subi=Subiaco; WEMB=Wembly

The top figure in each cell of Appendix 6 represents the percentage of the total sales in that price decile that are in a particular suburb. For example, 32.8 per cent of all sales in the second decile ($126,000 to $180,000) were in Shenton Park.

The second figure in each cell represents the proportion of all sales from that surburb that are found in that decile. For example, 27.9 per cent of all sales in Crawley in 2001-02 were in the first decile ($125,000 and under).